THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Board Action

- **Board of Directors**
  One Water and Adaptation Committee

12/9/2025 Board Meeting

7-6

Subject

Adopt CEQA determination that the proposed action was previously addressed in the 2019 Mitigated Negative Declaration, and authorize an amendment extending the term to December 31, 2029 for the Rancho Los Cerritos – Looking Back to Advance Forward Project Agreement under the Stormwater for Direct Use Program

Executive Summary

The Metropolitan Water District of Southern California (Metropolitan) initiated the Stormwater for Direct Use Pilot Program (Pilot Program) in 2019 to encourage the development and monitoring of direct-use stormwater projects, with the goal of evaluating the water supply benefits of stormwater for direct-use projects to consider potential stormwater programs in the future. The Pilot Program provides funding for construction and three required annual monitoring reports once projects are operational.

Metropolitan has two active agreements under the Pilot Program. One of those active agreements is the Rancho Los Cerritos – Looking Back to Advance Forward Project Agreement (Agreement) with the City of Long Beach (Long Beach) and the Rancho Los Cerritos Foundation (Rancho Los Cerritos). The Agreement currently expires on December 31, 2025. The project experienced delays in starting operation and challenges with installing metering devices. Long Beach and Rancho Los Cerritos are requesting a term extension to December 31, 2029, in order to obtain and install a device that measures stormwater capture, which is a necessary data point in the monitoring reports required of the Pilot Program. The extension will allow the Parties to provide Metropolitan with the three annual monitoring reports required under the Pilot Program.

Proposed Action(s)/Recommendation(s) and Options

Staff Recommendation: Option #1

Option #1

Adopt CEQA determination that the proposed action was previously addressed in the 2019 Mitigated Negative Declaration and authorize an amendment extending the term to December 31, 2029, for the Rancho Los Cerritos – Looking Back to Advance Forward Project Agreement under the Stormwater for Direct Use Program.

Fiscal Impact: No financial impacts from the proposed extension is anticipated. The financial impact of the project, including the $60,000 costs for the monitoring reports, was previously authorized by the Board.
Business Analysis: If authorized, Metropolitan will fulfill the goal of the Stormwater for Direct Use Pilot Program by using the monitoring reports to evaluate the water supply benefits of stormwater for direct-use projects to consider potential future programs.

Option #2

Do not authorize an amendment extending the term to December 31, 2029, for the Rancho Los Cerritos – Looking Back to Advance Forward Project Agreement under the Stormwater for Direct Use Pilot Program.
Fiscal Impact: Metropolitan will retain $60,000 of funds previously authorized for the project.

Business Analysis: If the Agreement expires before the monitoring reports are submitted, Metropolitan will miss an opportunity to evaluate the water supply benefits of stormwater for direct-use projects to consider potential future programs.

Alternatives Considered

Not applicable

Applicable Policy

By Minute Item 51734, dated September 10, 2019, the Board authorized $5.0 million for the Stormwater for Direct Use Pilot Program.

By Minute Item 52207, dated December 8, 2020, the Board authorized the General Manager to enter into a Stormwater for Direct Use Pilot Program Agreement with the City of Long Beach and Rancho Los Cerritos for the Rancho Los Cerritos – Looking Back to Advance Forward Project for up to 1.05 AFY of captured stormwater and offset of existing potable on-site irrigation demands under the terms, as set forth in Agenda Item 7-5 board letter.

Related Board Action(s)/Future Action(s)

None required

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

On December 8, 2020, the Board acted as a Responsible Agency, certified that it reviewed and considered the information in the Culver Boulevard Realignment and Stormwater Treatment Project Mitigated Negative Declaration (SCH No. 2018121033), and adopted the Lead Agency's Mitigation Monitoring and Reporting Program prior to approval of the terms and conditions for the Stormwater for Direct Use Program agreement. The present board action relates solely to the extension of a program agreement to complete annual monitoring reports and does not involve or authorize changes to the actual project itself. Therefore, the environmental documentation previously prepared and adopted in connection with the project fully complies with CEQA, and no further environmental analysis or documentation is required.

CEQA determination for Option #2:

None required

Details and Background

Pilot Program Background

In 2018 and 2019, Metropolitan's Board of Directors and Member Agencies provided feedback that Metropolitan should explore programs for stormwater development. Metropolitan's existing Local Resources Program does not fund local stormwater capture projects, due in part to the need for a better understanding of the connection between captured stormwater and water supply yield. In response, Metropolitan developed the Pilot Program, which the Board authorized in August 2019. Concurrently, Metropolitan's Board also authorized the Stormwater for Recharge Pilot Program, which is not part of this Pilot Program.

The Pilot Program provides funding for both new construction and retrofit projects that capture and store stormwater for an on-site potable water offset, such as landscape irrigation. New construction projects are eligible to receive up to $440,000 with a one-to-one required funding match. Retrofit projects are eligible to receive up to $100,000 for the installation of meters on existing projects. All projects under the Pilot Program are required to install metering devices to measure the capture and reuse of stormwater from the projects' facilities. Both new construction and retrofit projects are required to submit three consecutive annual monitoring reports once projects are operational, and Metropolitan provides $20,000 for each report. The application period for the Pilot Program ended on December 31, 2022.

Metropolitan received a total of five applications to the Pilot Program, of which three eligible new construction applications were authorized by the Board for agreement execution. No retrofit project agreements were executed. Recently, one of the agreements in the Pilot Program was terminated, so only two projects remain as active agreements in the Pilot Program. The Culver Boulevard Realignment and Stormwater Filtration and Retention Project recently received board authorization in September 2025 for an agreement extension. The other agreement, the Rancho Los Cerritos – Looking Back to Advance Forward Project (Project), is the subject of this board letter **(Attachment 1)**.

Rancho Los Cerritos – Looking Back to Advance Forward Project

Metropolitan entered into the Agreement with Long Beach and Rancho Los Cerritos for the Project on December 8, 2020. The project constructed permeable paving and a 22,000-gallon underground cistern to capture and treat up to 1.05 acre-feet of stormwater annually at Rancho Los Cerritos, a 4.7-acre public museum and historic landmark, for on-site irrigation use.

The Project completed construction in March 2025, which is past the estimated completion date of May 2022. The delays were primarily caused by contractor issues during the initial phases of construction, switching contractors towards the end of construction, and a longer-than-anticipated timeline for creating the annual maintenance plan. Once construction was complete, Metropolitan and Rancho Los Cerritos met to discuss the monitoring requirements of the Pilot Program. At this time, Rancho Los Cerritos informed Metropolitan that the Project did not include a device to measure stormwater capture, which is a key requirement of the annual monitoring reports. Over the next few months, Rancho Los Cerritos met challenges in identifying a device that could measure stormwater inflow into the cistern. As a result, Long Beach provided technical assistance to Rancho Los Cerritos, and the two agencies identified a sensor that can measure the water level in the cistern, which could be used to interpolate the timing and volume of stormwater capture. Rancho Los Cerritos expects the sensor to be installed by March 1, 2026.

Proposed Term Extension

The challenges described above prevent Long Beach and Rancho Los Cerritos from submitting the required annual monitoring reports before the Agreement expires on December 31, 2025. The agencies are requesting an agreement extension to December 31, 2029, to allow for the monitoring reports to be completed and submitted to Metropolitan.

If the Agreement is extended, Rancho Los Cerritos can install the cistern level censor and begin collecting data for the monitoring reports. Metropolitan would receive the first annual monitoring report, covering Fiscal Year 2026-2027, in August of 2027.

If the Board authorizes the amendment extending the term, Metropolitan can fulfill the goal of the Pilot Program by using the monitoring reports to evaluate the water supply benefits of stormwater for direct-use projects to consider potential future programs. The monitoring reports for the project will cost Metropolitan a total of $60,000 across three years ($20,000 per report). However, these costs are already committed through a prior board authorization and are included in Metropolitan's budget.

12/1/2025
Brandon J. Goshi *Date*
Manager, Water Resource Management

12/1/2025
Deven N. Upadhyay *Date*
General Manager

Attachment 1 – Rancho Los Cerritos – Looking Back to Advance Forward Project Board Authorization

Ref# wrm12704399

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

BOARD ACTION

Board of Directors

Water Planning and Stewardship Committee

12/8/2020 Board Meeting

7-5

Subject

Review and consider the City of Long Beach's certified Final EIR and Addenda and take related CEQA actions, and authorize the General Manager to enter into a Stormwater for Direct Use Pilot Program Agreement with the City of Long Beach and Rancho Los Cerritos

Executive Summary

This letter requests authorization for Metropolitan to enter into a Stormwater for Direct Use Pilot Program (Pilot Program) Agreement with the City of Long Beach (City) and Rancho Los Cerritos (Rancho Los Cerritos) for the Rancho Los Cerritos - Looking Back to Advance Forward Project (Project). The Project will capture an estimated 1.05 acre-feet per year (AFY) of stormwater and offset potable water irrigation for on-site landscaping. The City will submit monitoring reports for the first three years after the start of operation. The Project will contribute towards Metropolitan's evaluation and understanding of local stormwater capture projects and their performance in providing regional water supply benefits.

Details

Background

Metropolitan developed the Pilot Program to better understand the water supply benefits and assess the performance of stormwater projects. Direct-use projects capture and store rainfall and stormwater runoff on-site and use it to meet non-potable demands. The Pilot Program encourages development of new and retrofitting of existing, direct-use stormwater projects by providing financial incentives for construction and monitoring. The primary purpose of the Pilot Program is to collect information from several region-wide stormwater projects. The data and operational information collected will provide a better understanding of actual stormwater runoff capture volumes, costs, and project performance. The Pilot Program will help evaluate the potential water supply benefits delivered by stormwater capture projects and provide a basis for possible future funding approaches.

Proposed Project

The Project will capture and treat up to 1.05 acre-feet of stormwater annually at Rancho Los Cerritos, a 4.7-acre public museum and historic landmark operated by the Rancho Los Cerritos Foundation in conjugation with the City of Long Beach. The Project will construct permeable paving and a 22,000-gallon underground cistern to capture runoff. The runoff will be filtered and further treated with ultraviolet light before being used to irrigate the Rancho's landscape. Additionally, although not included in this agreement, the Project will expand stormwater storage in an existing arroyo. The captured stormwater in the arroyo will be treated through biofiltration. Rancho Los Cerritos will own and operate the Project and plans to start operation by May 2022.

Attachment 1 includes the key terms of the proposed Agreement. Subject to approval in form by the General Counsel, key terms include the following requirements:

1. Meter(s) for measurement of capture and use.
2. Offset potable or reclaimed water use.
3. Have an estimated minimum design capture and use of one acre-foot per year.
4. Complete construction, install meters, and start operation within two years from agreement execution.

5. Submit three years of data collection and reporting to Metropolitan.

The Project, described in **Attachment 2**, complies with the Pilot Program criteria adopted by the Board on September 10, 2019.

To better understand the role of regional stormwater capture projects on local water supply development, staff recommends that the Board authorize the General Manager to enter into a Pilot Program Agreement with the City and Rancho Los Cerritos to provide funding for Project construction and monitoring.

Policy

By Minute Item 51734, dated September 10, 2019, the Board authorized $5.0 million for the Stormwater for Direct Use Pilot Program.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

Pursuant to the provisions of CEQA and the State CEQA Guidelines, the City of Long Beach, acting as the CEQA Lead Agency, prepared and certified a Final Environmental Impact Report (EIR) for the Rancho Los Cerritos Master Plan in the City of Long Beach. The Final EIR was certified and approved by the Lead Agency on April 02, 2002. The Lead Agency also adopted findings, a Mitigation Monitoring and Reporting Program (MMRP) and Statement of Overriding Considerations (SOC). The Lead Agency subsequently prepared and approved an Addendum to the Final EIR in December 2006 for minor modifications to the original approved Master Plan. Subsequent to that, the City approved the specific stormwater project subject to this agreement and filed a Notice of Determination with the State Clearinghouse on September 10, 2020. Additionally, the City prepared and approved an Addendum to the Final EIR in October 2020 to address minor modifications to the project. As a Responsible agency, Metropolitan is required to certify that it has reviewed and considered the information in the Final EIR and Addenda for this project and adopt the Lead Agency's findings, SOC, and MMRP prior to approval of the formal terms and conditions for the proposed agreement. The environmental documentation is included as Attachment 3.

CEQA determination for Option #2:

None required

Board Options

Option #1

Review and consider the information in the City of Long Beach's certified Final EIR and Addenda for the project and take related CEQA actions, and authorize the General Manager to enter into a Stormwater for Direct Use Pilot Program Agreement with the City of Long Beach and Rancho Los Cerritos for the Rancho Los Cerritos - Looking Back to Advance Forward Project for up to 1.05 AFY of captured stormwater and offset of existing potable on-site irrigation demands under the terms included in this board letter.

Fiscal Impact: Metropolitan's maximum obligation is $324,800 for eligible Project expenses and a three-year monitoring and reporting period. These funds were budgeted within the FY 2020/21 and FY 2021/22 demand management budget.

Business Analysis: The Project would help Metropolitan to achieve the Pilot Program goal of understanding stormwater capture project costs, benefits and performance and their role in local supply development.

Option #2

Defer consideration of agreement until completion of the 2020 Integrated Resources Plan.

Fiscal Impact: None

Business Analysis: Deferring agreement execution would slow Metropolitan's planning efforts to understand how stormwater projects improve regional water supply reliability and could hinder Metropolitan's ability to work with local agencies. Deferral would also be inconsistent with recent Board actions to approve other Local Resource Program projects and to fund environmental review of the Regional Recycled Water Program.

Option #3

Do not authorize execution of an agreement for the Project.
Fiscal Impact: None.
Business Analysis: Metropolitan would pursue other projects and it may take longer to meet the goals of the Pilot Program.

Staff Recommendation

Option #1

11/23/2020
Brad Coffey *Date*
Manager, Water Resource Management

11/24/2020
Jeffrey Kightlinger *Date*
General Manager

Attachment 1 – Rancho Los Cerritos – Looking Back to Advance Forward Project Term Sheet

Attachment 2 – Rancho Los Cerritos – Looking Back to Advance Forward Project Description

Attachment 3 – Environmental Documentation

Ref# wrm12669587

Term Sheet for Rancho Los Cerritos Looking Back to Advance Forward Project
Stormwater for Direct Use Pilot Program

Project Overview

- Project Type: New construction
- Member Agency/Sub-Agency: City of Long Beach (Long Beach)/Rancho Los Cerritos (Rancho Los Cerritos)
- Estimated Stormwater Capture: 1.05 AF
- Project Area: 200,000 SF
- Targeted Zone: Coastal
- Agreement Term: Execution Date to end of Monitoring Period
- Start of Operation Deadline: Two years from Agreement Execution Date
- Monitoring Period: Three full fiscal years following Start of Operation Date

Project Costs

- Estimated Total Project Costs: $1,622,600.
- Maximum Metropolitan Contribution: $324,800
    - Capital Costs: $264,800 (up to 50% reimbursement of eligible costs)
    - Monitoring and Reporting: $60,000 ($20,000 per report, total of three reports)

- The estimated capital costs include the construction of an underground cistern and ultraviolet sterilization treatment, permeable paving, and expansion of an existing arroyo and biofiltration treatment, which will allow for the use of captured water to be used for onsite irrigation.
- Long Beach is responsible for all submittals, including:
    - Quarterly invoices and progress reports throughout the construction period
    - Annual monitoring report and database collection following the start of operation (three-year monitoring period)
- Metropolitan will make all payments directly to Rancho Los Cerritos.

- The actual, eligible construction costs of the Project determine the capital incentive payments. Metropolitan will pay the capital incentive payments on a quarterly basis upon verification of eligibility, deliverables, and approval of invoices.

- Metropolitan will issue the monitoring and reporting payments upon approval of the submitted monitoring report and database collection.

RANCHO LOS CERRITOS LOOKING BACK TO ADVANCE FORWARD PROJECT

Project Description

Overview:

The Rancho Los Cerritos Looking Back to Advance Forward Project (Project) compromises two methods for capturing, storing, and treating stormwater. The first method involves the collection and treatment of runoff through permeable pavement that leads to an underground cistern. The second method channels and treats stormwater into a natural arroyo at the lowest point of the Project's property. Rancho Los Cerritos will own and operate the Project. This agreement only includes the stormwater capture and the underground cistern treatment components of the Project.

Project Facilities:

As part of this agreement, the Project facilities include an underground cistern and permeable paving. Of the 200,000 sq. ft. at the Project site, approximately 40 percent of the rainfall on site will be retained through an infiltrating plant selection. It is estimated that the Project facilities will eventually capture and treat up to 1.05 acre-feet per year of stormwater. One portion of the facility will absorb and collect stormwater through new permeable paving leading to an underground 22,000-gallon cistern located onsite. The Project will filter and treat the stormwater captured at the cistern using ultraviolet sterilization. The treated stormwater will then be used for onsite landscape irrigation. Although not included in this agreement, another portion of the facility will expand a natural arroyo to hold a greater amount of stormwater. The stormwater channeled into the arroyo will be treated through biofiltration.

Source of Water:

Source of water includes stormwater runoff from drains located at the Project facility, as well as stormwater diverted from the facility into a nearby natural arroyo. Captured stormwater will be treated prior to use for irrigation purposes.

Points of Connection:

Project facilities begin at the drain diversion points and end at irrigation system interties or the nearby arroyo.

ADDENDUM TO ENVIRMENTAL IMPACT REPORT FOR THE RANCHO LOS CERRITOS STORMWATER DIRECT USE PROGRAM

Prepared by
City of Long Beach
Development Services Department
Planning Bureau
411 West Ocean Boulevard, 3rd Floor
Long Beach, CA 90802

1. Introduction:

The Project proposes the installation of drought tolerant landscaping, pervious pavement, underground stormwater storage tank and related pumps and piping at 4600 Virginia Road in the Park (P) Zoning District. An Environmental Impact Report (EIR) (SCH #99148658) and EIR Addendum (December 2006) were prepared for the overall Rancho Los Cerritos Master Plan Project. The EIR was distributed to public agencies and made available for public review and comment and made available for a 45-day public review period from February 1, 2002 to March 18, 2002. The Long Beach Planning Commission carried out the approval of the overall Rancho Los Cerritos Master Plan Project on April 18, 2002 and the Notice of Determination was filed with the Los Angeles County Clerk on April 23, 2002.

In 2006, an EIR Addendum was approved for modifications to the previously approved Rancho Los Cerritos Master Plan. The modified Phase II considered in Application No. 0610-29 included components related to this application as follows: Removal of the 1950s City-added asphalt parking lot, to be partially replaced with decomposed granite and four disabled parking spaces. The remaining area of the demolished parking lot will be landscaped with California native plant species extending to the northwest corner of the site to create a California native garden. The construction of the barnyard complex was included in the overall project approved under the 2002 EIR.

The 2002 EIR provided mitigation measures addressing potential impacts related to aesthetics, air quality, biological resources, cultural resources, geology and soils, hydrology, land use and planning, and transportation/traffic. Impacts related to parking were found to be significant and unavoidable and the Long Beach Planning Commission adopted as Statement of Overriding Considerations. The 2006 EIR Addendum identified mitigation related to land use and planning and transportation/traffic. The recommended mitigation in the 2002 EIR Addendum concluded that the impacts would be reduced to a less than significant level with mitigation incorporated.

Pursuant to CEQA Section 15162, when a EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record that additional analysis is required. As stated in the following analysis, the proposed project would be consistent with the certified EIR and EIR Addendum and no new impacts would occur. Therefore, no subsequent environmental analysis is

warranted under CEQA.

2. Project Modification Description:

Since the approval of the original project (as described in Section 1 of this addendum), a minor project modification has occurred that needs to be addressed within the context of CEQA and the State CEQA Guidelines. The City of Long Beach is proposing to obtain financial assistance for the approved project through the Stormwater for Direct Use Pilot Program (SDUPP) that is administered by The Metropolitan Water District of Southern California (Metropolitan). The SDUPP encourages development and monitoring of new and existing direct-use stormwater projects by providing financial incentives for construction or retrofit of projects and supplemental monitoring and reporting costs.

Metropolitan offers different SDUPP incentive amounts based on project type (New Construction or Retrofit):

PROJECT TYPE	FUNDING COMPONENTS	
	Construction/Installation	Monitoring & Reporting
Retrofit	Up to $100,000 reimbursement for eligible costs	$20,000/report
	Maximum of $160,000	
New Construction	Up to $440,000 (1:1 match) reimbursement for eligible costs	$20,000/report
	Maximum of $500,000	

The City of Long Beach has chosen the New Construction Project Type.

As the Lead Agency, the City of Long Beach has prepared this addendum to the previously certified Environmental Impact Report (EIR) in support of its discretionary action to comply with CEQA and the State CEQA Guidelines. For this proposed project modification, Metropolitan will act as a Responsible Agency.

3. Minor Technical Additions:

This addendum has been prepared since partnering in the original project would require a discretionary action by the Lead Agency's decision making body.

On October 13, 2020 the City of Long Beach submitted the proposal on the Rancho Los Cerritos Stormwater Direct Use Program to Metropolitan. As the Responsible Agency, Metropolitan's Board of Directors will review and consider the proposal and environmental documentation prepared by the City of Long Beach in determining whether or not to approve financial assistance for the project within the SDUPP administrative process.

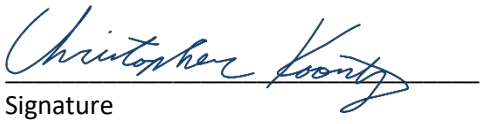
The proposed project modification (i.e., a partnership with Metropolitan in the SDUPP for the Rancho Los Cerritos Stormwater Direct Use Program) would be consistent with Metropolitan's commitment to develop SDUPP activities that would provide a better understanding of the connection between captured stormwater and water supply yield.

Therefore, this minor technical change and further clarification to the original project has no impact on water supplies or water quality within the Lead Agency's service area. Instead, the proposed project modification is an administrative and fiscal action.

4. Basis for Preparation of Addendum:

Section 15164(a) of the State CEQA Guidelines states "The lead agency or a responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred."

The proposed modification to the original project would not result in a tangible change in the physical environment. As the Lead Agency for the proposed project modification, the City of Long Beach is issuing this addendum in accordance with the State CEQA Guidelines (Section 15164). The minor textual additions provided herein are not considered to 1) constitute a substantial change in the project as originally proposed by the City of Long Beach, 2) lead to substantial changes in the circumstances under which the project is undertaken, or 3) constitute new information of substantial importance. Accordingly, an addendum was prepared as opposed to a negative declaration or a subsequent environmental impact report.



Signature

October 13, 2020
Date

Christopher Koontz
Printed Name

Deputy Director of Development Services
Title

CITY OF LONG BEACH
Development Services
Planning Bureau
411 West Ocean Boulevard, 3rd Floor, Long Beach, CA 90802
(562) 570-6194

NOTICE OF DETERMINATION

TO: ☒ Office of the County Clerk
Environmental Filings
12400 E. Imperial Highway, Room 1201
Norwalk, CA 90650

☐ Office of Planning and Research
1400 Tenth St., Room 121
Sacramento, CA 95814

FROM: City of Long Beach
Department of Development Services
411 W. Ocean Boulevard, 3rd Floor
Long Beach, CA 90802

Contact: Maryanne Cronin, Planner III
Phone: (562) 570-6194

Lead Agency (if different from above): City of Long Beach

Subject: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

State Clearinghouse Number (if submitted to Clearinghouse): 99148658

Project Title: Rancho Los Cerritos Master Plan Project (COAS2009-25)

Project Applicant: Rancho Los Cerritos Foundation,
4600 Virginia Road, Long Beach, CA 90807

Project Location (include county): 4600 Virginia Road, Long Beach, CA 90807 (Los Angeles County)

Project Description: The installation of drought tolerant landscaping, pervious pavement, underground stormwater storage tank and related pumps and piping at 4600 Virginia Road in the Park (P) Zoning District.

Environmental Review: Pursuant to Section 15162 of the CEQA Guidelines, this project is covered by the adopted Environmental Impact Report (EIR) (2002) and EIR Addendum (2006) for the Rancho Los Cerritos Master Plan Project (SCH NO. 99148658) and no new environmental documentation is required.

This is to advise that the City of Long Beach (lead agency) has approved the above-described project on **September 10, 2020**, and has made the following determinations regarding the above-described project:

1. The project (☐ will/☒ will not) have a significant effect on the environment.
2. ☒ The project was determined to be within the scope of the adopted Environmental Impact Report (EIR) and EIR Addendum prepared for the Rancho Los Cerritos Master Plan Project (SCH No. 99148658). A EIR (2002) and an EIR Addendum (2006) were prepared pursuant to the provisions of CEQA. (Adopted by the Long Beach Planning Commission on April 18, 2002 and December 21, 2006.)

   ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA

   ☐ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA
3. Mitigation Measures (☒ were/☐ were not) made a condition of the approval of the project. (EIR and EIR Addendum Measures).
4. A Mitigation Monitoring and Reporting Program (☒ was/☐ was not) adopted for this project. (EIR and EIR Addendum MMRP).
5. A Statement of Overriding Considerations (☒ was/☐ was not) adopted for this project.
6. Findings (☒ were/☐ were not) made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval, or the EIR and EIR Addendum, is available to the general public at:

City of Long Beach, Department of Development Services, 411 W. Ocean Blvd. 3rd Floor, Long Beach, CA 90803

Signature (Public Agency) _____ Title: Planner

Date: 9/11/2020 Date Received for filing at OPR _____

Authority cited: Sections 21083, Public Resources Code; Reference Section 21000–21174, Public Resources Code

CALIFORNIA ENVIRONMENTAL QUALITY ACT
ENVIRONMENTAL COMPLIANCE DETERMINATION
4600 Virginia Road
Application No. COAS2009-25
September 10, 2020

Section 15162 of the California Environmental Quality Act (CEQA) establishes when subsequent Environmental Impact Reports (EIRs) or negative declarations shall be prepared. The Project proposes the installation of drought tolerant landscaping, pervious pavement, underground stormwater storage tank and related pumps and piping at 4600 Virginia Road in the Park (P) Zoning District. An Environmental Impact Report (EIR) (SCH #99148658) and EIR Addendum (December 2006) were prepared for the overall Rancho Los Cerritos Master Plan Project. The EIR was distributed to public agencies and made available for public review and comment and made available for a 45-day public review period from February 1, 2002 to March 18, 2002. The Long Beach Planning Commission carried out the approval of the overall Rancho Los Cerritos Master Plan Project on April 18, 2002.

In 2006, an EIR Addendum was approved for modifications to the previously approved Rancho Los Cerritos Master Plan. The modified Phase II considered in Application No. 0610-29 included components related to this application as follows: Removal of the 1950s City-added asphalt parking lot, to be partially replaced with decomposed granite and four disabled parking spaces. The remaining area of the demolished parking lot will be landscaped with California native plant species extending to the northwest corner of the site to create a California native garden. The construction of the barnyard complex was included in the overall project approved under the 2002 EIR.

The 2002 EIR provided mitigation measures addressing potential impacts related to aesthetics, air quality, biological resources, cultural resources, geology and soils, hydrology, land use and planning, and transportation/traffic. Impacts related to parking were found to be significant and unavoidable and the Long Beach Planning Commission adopted as Statement of Overriding Considerations. The 2006 EIR Addendum identified mitigation related to land use and planning and transportation/traffic. The recommended mitigation in the 2002 EIR Addendum concluded that the impacts would be reduced to a less than significant level with mitigation incorporated.

Pursuant to CEQA Section 15162, when a EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record that additional analysis is required. As stated in the following analysis, the proposed project would be consistent with the certified EIR and EIR Addendum and no new impacts would occur. Therefore, no subsequent environmental analysis is warranted under CEQA.

CEQA Section 15162:

(a) WHEN AN EIR HAS BEEN CERTIFIED OR A NEGATIVE DECLARATION ADOPTED FOR A PROJECT, NO SUBSEQUENT EIR SHALL BE PREPARED FOR THAT PROJECT UNLESS THE LEAD AGENCY DETERMINES, ON THE BASIS OF SUBSTANTIAL EVIDENCE IN THE LIGHT OF THE WHOLE RECORD, ONE OR MORE OF THE FOLLOWING:

(1) SUBSTANTIAL CHANGES ARE PROPOSED IN THE PROJECT WHICH WILL REQUIRE MAJOR REVISIONS OF THE PREVIOUS EIR OR NEGATIVE DECLARATION DUE TO THE INVOLVEMENT OF NEW SIGNIFICANT ENVIRONMENTAL EFFECTS OR A SUBSTANTIAL INCREASE IN THE SEVERITY OF PREVIOUSLY IDENTIFIED SIGNIFICANT EFFECTS;

The EIR and EIR Addendum analyzed the master plan in its entirety and based on the proposed phasing plan. The project is currently within the scope of improvements for the master plan. The installation of drought tolerant landscaping, pervious pavement, underground stormwater storage tank and related pumps and piping would be consistent with the location, use, and materials analyzed in the EIR and EIR Addendum. All mitigation measures identified in the previous environmental documents would remain in full force and effect. No new significant environmental effects or a substantial increase in the severity of previously identified environmental effects would occur.

(2) SUBSTANTIAL CHANGES OCCUR WITH RESPECT TO THE CIRCUMSTANCES UNDER WHICH THE PROJECT IS UNDERTAKEN WHICH WILL REQUIRE MAJOR REVISIONS OF THE PREVIOUS EIR OR NEGATIVE DECLARATION DUE TO THE INVOLVEMENT OF NEW SIGNIFICANT ENVIRONMENTAL EFFECTS OR A SUBSTANTIAL INCREASE IN THE SEVERITY OF PREVIOUSLY IDENTIFIED SIGNIFICANT EFFECTS; OR

The EIR and EIR Addendum were prepared, circulated, and adopted in 2003 and 2006, respectively. There have been no additional changes to the master plan since approval of the EIR Addendum in 2006. No changes have occurred related to site or project circumstances that would result in additional environmental impacts. No new significant environmental effects or a substantial increase in the severity of previously identified environmental effects would occur.

(3) NEW INFORMATION OF SUBSTANTIAL IMPORTANCE, WHICH WAS NOT KNOWN AND COULD NOT HAVE BEEN KNOWN WITH THE EXERCISE OF REASONABLE DILIGENCE AT THE TIME THE PREVIOUS EIR WAS CERTIFIED AS COMPLETE OR THE NEGATIVE DECLARATION WAS ADOPTED, SHOWS ANY OF THE FOLLOWING:

> **(A) THE PROJECT WILL HAVE ONE OR MORE SIGNIFICANT EFFECTS NOT DISCUSSED IN THE PREVIOUS EIR OR NEGATIVE DECLARATION;**

The EIR and EIR Addendum were prepared, circulated, and adopted in 2003 and 2006, respectively. No information indicates that new significant impacts would occur that were not previously analyzed. All potential impacts were determined to be mitigated to a less than significant level in EIR Addendum, which included analysis of the project as proposed. The mitigation measures will remain in effect for the proposed project, including archaeological and Native American monitoring during ground-disturbing activities. No new significant environmental effects or a substantial increase in the severity of previously identified environmental effects would occur.

(B) SIGNIFICANT EFFECTS PREVIOUSLY EXAMINED WILL BE SUBSTANTIALLY MORE SEVERE THAN SHOWN IN THE PREVIOUS EIR;

The EIR and EIR Addendum were prepared, circulated, and adopted in 2003 and 2006, respectively. No information indicates that previously examined impacts would become more severe with implementation of the project. All potential impacts were determined to be mitigated to a less than significant level in EIR Addendum, which included analysis of the project as proposed. Furthermore, parking impacts are no longer considered under the CEQA significance thresholds. The mitigation measures will remain in effect. No new significant environmental effects or a substantial increase in the severity of previously identified environmental effects would occur.

(C) MITIGATION MEASURES OR ALTERNATIVES PREVIOUSLY FOUND NOT TO BE FEASIBLE WOULD IN FACT BE FEASIBLE, AND WOULD SUBSTANTIALLY REDUCE ONE OR MORE SIGNIFICANT EFFECTS OF THE PROJECT, BUT THE PROJECT PROPONENTS DECLINE TO ADOPT THE MITIGATION MEASURE OR ALTERNATIVE; OR

All potential impacts were determined to be mitigated to a less than significant level in EIR Addendum, which included analysis of the project as proposed. The 2002 EIR considered three project alternatives: 1) No Project Alternative, 2) Increased On-Site Parking, and 3) Partial Project. The 2006 EIR Addendum evaluated the revised project's consistency with the 2002 Project Alternatives analysis. The 2006 EIR Addendum concluded that the proposed modifications of the master plan were determined to be the environmentally superior project in the 2002 EIR and no further Alternatives analysis for the EIR Addendum was necessary. The project remains consistent with the master plan and the mitigation measures will remain feasible and in effect for the project. No new significant environmental effects or a substantial increase in the severity of previously identified environmental effects would occur.

(D) MITIGATION MEASURES OR ALTERNATIVES WHICH ARE CONSIDERABLY DIFFERENT FROM THOSE ANALYZED IN THE PREVIOUS EIR WOULD SUBSTANTIALLY REDUCE ONE OR MORE SIGNIFICANT

EFFECTS ON THE ENVIRONMENT, BUT THE PROJECT PROPONENTS DECLINE TO ADOPT THE MITIGATION MEASURE OR ALTERNATIVE.

All potential impacts were determined to be mitigated to a less than significant level in EIR Addendum, which included analysis of the project as proposed. No new mitigation is required to reduce potential impacts further than previously analyzed. The mitigation measures will remain feasible and in effect for the project. No new significant environmental effects or a substantial increase in the severity of previously identified environmental effects would occur.

CITY OF LONG BEACH

RANCHO LOS CERRITOS MASTER PLAN PROJECT

ADDENDUM TO ENVIRONMENTAL IMPACT REPORT EIR No. 25-99 (SCH#99148658)

EIR No. 18-06

December 2006

City of Long Beach
Department of Planning and Building
333 W. Ocean Boulevard, 5th Floor
Long Beach, CA 90802

Contact: Angela Reynolds, Planning Manager
(562) 570-6357

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SECTION 1.0
EXECUTIVE SUMMARY

1.1 Introduction

In accordance with CEQA Guidelines Section 15123, the following is a brief project summary identifying each significant effect associated with project implementation and any proposed mitigation measures or alternatives that would reduce or avoid those effects; areas of controversy known to the lead agency, including issues raised by agencies and the public; and issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects.

1.2 Project Background

The project analyzed by this environmental document is a modification to the previously approved Master Plan for the Rancho Los Cerritos property, located at 4600 Virginia Road in the City of Long Beach. The modification to the Rancho Los Cerritos Master Plan project involves elimination of the eight space staff parking lot, originally proposed in the northeast corner of the Rancho project site, and replacement of these parking spaces through continuous use and access of at least eight parking spaces in the neighboring Virginia Country Club parking areas. All other components of the previously approved Master Plan will remain unaltered by this proposed project modification.

1.3 Identified Impacts and Mitigation Measures

The following provides a summarized version of all potential impacts from the proposed Master Plan modification that the Initial Study determined could exceed the established significance threshold. This Section also includes the accompanying mitigation measure which would reduce potential impacts to a less than significant level. Environmental effects found not to be significant are provided in Section 4.0-3 of this document.

Land Use and Planning

Impact: The project could conflict with an applicable land use plan, policy, or regulation of any agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

Mitigation Measure:

Mitigation Measure 4.1.1: Standards Variance and Administrative Use Permit Approvals

The applicant shall obtain City approval of the requested Standards Variance and Administrative Use Permit to eliminate the previously required on-site staff parking lot and allow use of the existing Virginia Country Club parking lot OR revise the project design features to provide a minimum eight space on-site staff parking lot.

Monitoring Phase: Prior to issuance of any project building permits

Enforcement Agency: Department of Planning and Building

Monitoring Agency: Department of Planning and Building

It is anticipated that any potential impacts related to land use will be reduced to a less than significant level with mitigation incorporation.

Traffic, Circulation and Parking

Impact: The project modification could result in inadequate parking capacity.

Mitigation Measure:

Mitigation Measure 4.2.1: On-Site Parking Spaces

The applicant shall have continuous and unobstructed legal access to at least eight off-site parking spaces either at the Virginia Country Club or at any other property within 600 feet on the Rancho Los Cerritos property boundaries.

Monitoring Phase: Prior to issuance of a certificate of occupancy

Enforcement Agency: Department of Planning and Building

Monitoring Agency: Department of Planning and Building

SECTION 2.0
INTRODUCTION

2.1 Project Summary

The project analyzed under this Environmental Impact Report (EIR) Addendum represents a modification of the previously approved Rancho Los Cerritos Master Plan. This Master Plan provides for various upgrades and improvements over a 25 year period. The original 2002 EIR for this Master Plan (EIR No. 25-99, State Clearinghouse No. 99148658) was certified by the Long Beach Planning Commission on April 18, 2002.

The 4.74 acre project site is located at 4600 Virginia Road in the Los Cerritos neighborhood of Long Beach. This site abuts the Virginia Country Club to the east and south, and is surrounded by single family residential properties to the west and north (see Figure 2-1 Regional Map, Figure 2-2 Vicinity Map, and Figure 2-3 Existing Site Map).

Since the project is located within the City of Long Beach, the City of Long Beach has the responsibility for carrying out or approving this project. The City of Long Beach will therefore be the Lead Agency for this project with the responsibility for preparing this EIR Addendum as required by the California Environmental Quality Act (CEQA).

Questions regarding the preparation of this document and the City of Long Beach review of this project should be referred to the following person:

City of Long Beach
Department of Planning and Building
333 W. Ocean Boulevard, 5th Floor
Long Beach, CA 90802
Attention: Angela Reynolds, Planning Manager
(562) 570-6357

2.2 Purpose, Type and Intended Uses of this EIR

In accordance with Public Resources Code Section 21002.1, the intended use of this EIR is to identify the potentially significant environmental effects (impacts) resulting from implementation of the project, identify alternatives to the project, and indicate the manner in which those significant effects can be mitigated or avoided. This EIR is also intended as an informative document by other public agencies in connection with any approvals or permits necessary for the construction and operation of the project. The contents of this EIR are consistent

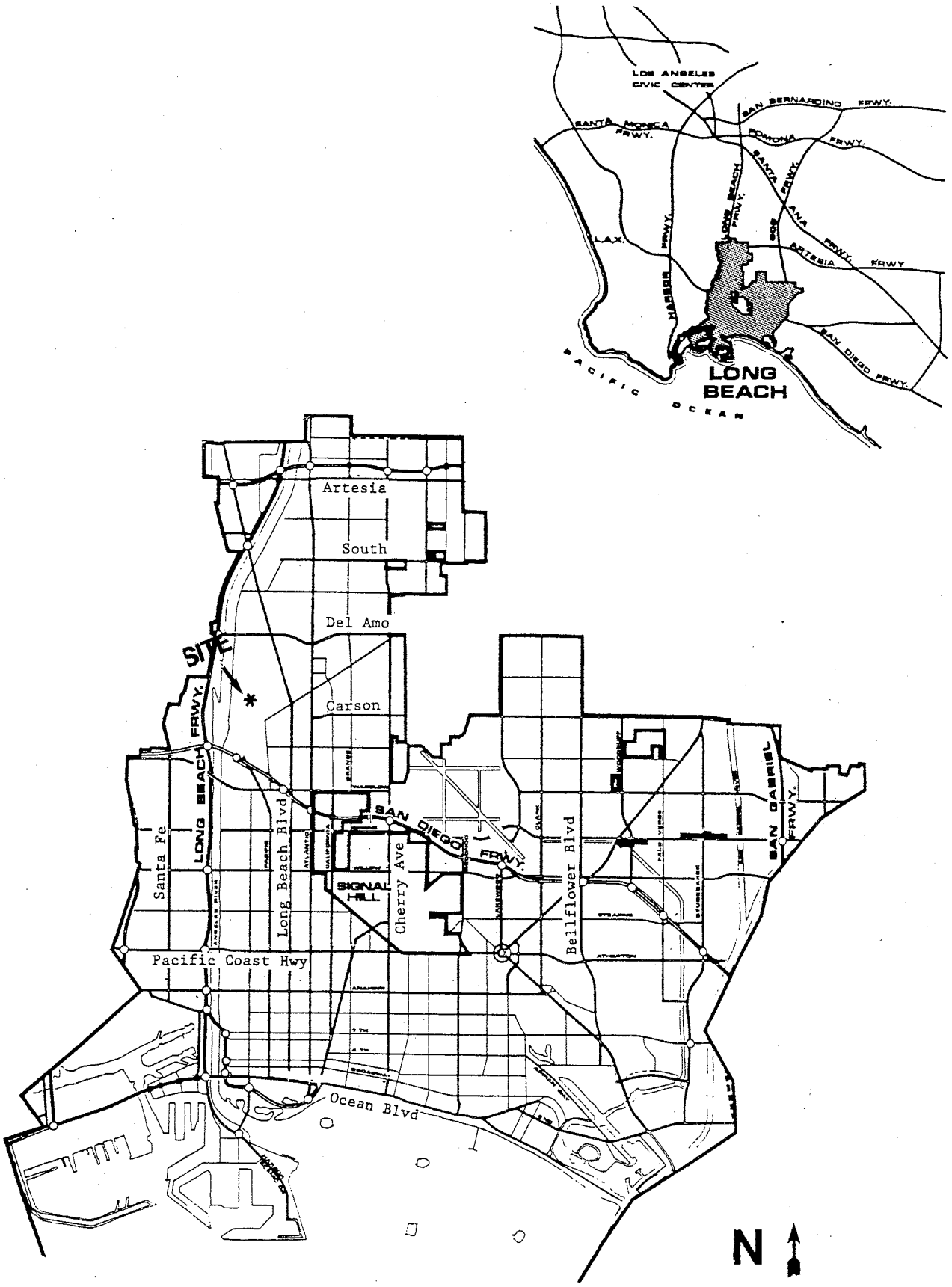


Figure 2-1
Regional Map

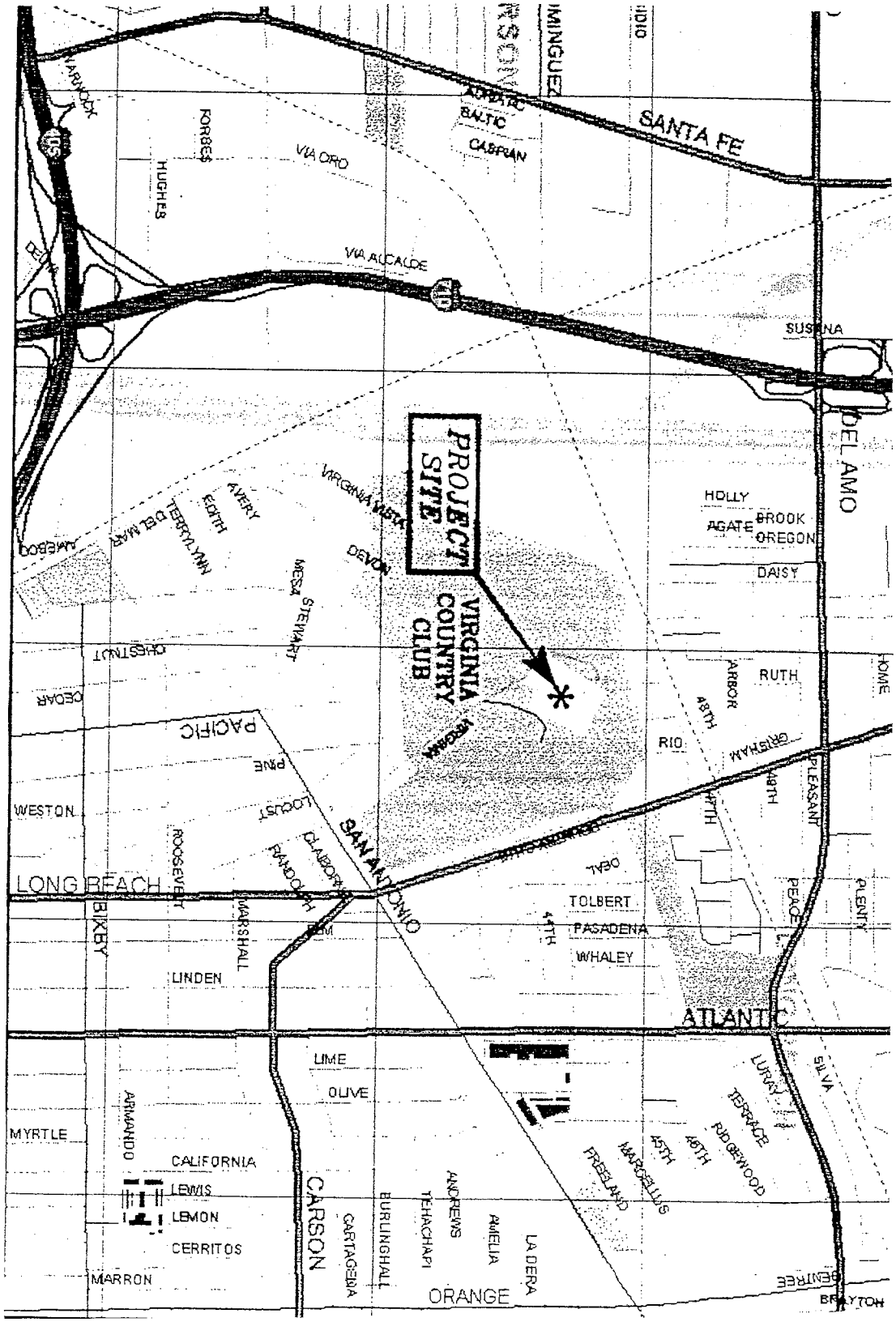


Figure 2-2
Vicinity Map

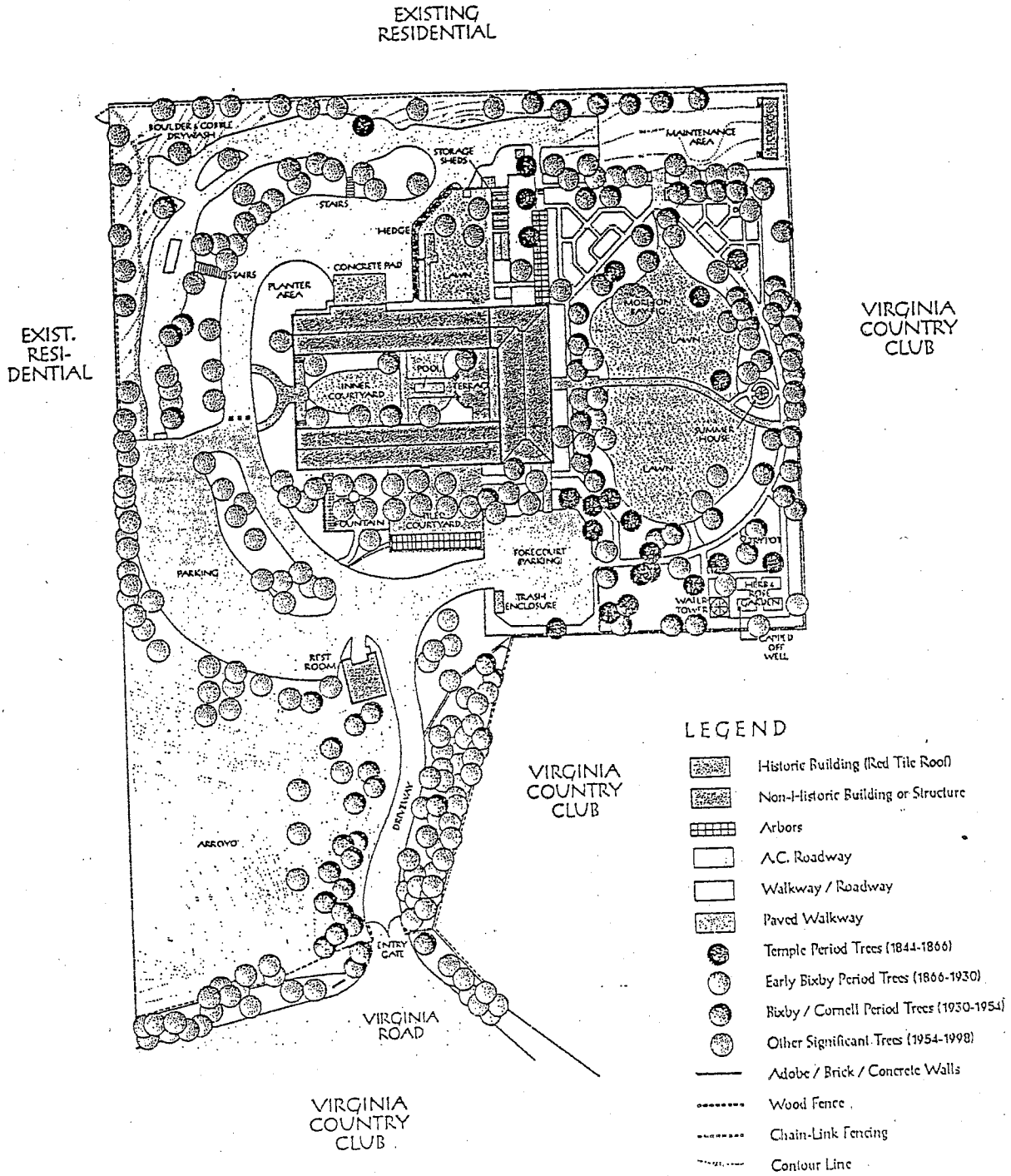


Figure 2-3
Existing Site Plan

with Public Resources Code Section 21100, which requires EIRs to include a detailed statement setting forth all of the following:

1. All significant effects on the environment of the proposed project;
2. A separate section identifying any significant effects on the environment that cannot be avoided if the project is implemented and any significant effects on the environment that would be irreversible if the project is implemented;
3. Mitigation measures proposed to minimize the significant effects on the environment, including but not limited to measures to reduce the wasteful, inefficient and unnecessary consumption of energy;
4. Alternative to the proposed project; and
5. The growth-inducing impacts of the proposed project.

In addition, the EIR shall contain a statement briefly indicating the reasons for determining that various effects on the environment of a project are not significant and consequently have not been discussed in detail in the EIR. Any significant effects on the environment shall be limited to substantial, or potentially substantial, adverse changes in the physical conditions which exist in the area as defined in Section 21060.5. CEQA permits the use of previously approved land use documents, including but limited to general plans, specific plans, and local coastal plans in the cumulative impact analysis.

This document is intended as an Addendum to the original project 2002 EIR and incorporates this EIR (EIR No. 25-99, State Clearinghouse No. 99148658) by reference in accordance with CEQA Guidelines Section 15150. The Lead Agency may choose to prepare an EIR Addendum under CEQA Guidelines Section 15164 if some changes or additions are necessary but none of the conditions described in CEQA Guidelines Section 15162 calling for preparation of a Subsequent EIR have occurred.

The modification to the Rancho Los Cerritos Master Plan project involves elimination of the eight space staff parking lot, originally proposed in the northeast corner of the Rancho project site, and replacement of these parking spaces through continuous use and access of at least eight parking spaces in the neighboring Virginia Country Club parking areas. All other components of the previously approved Master Plan will remain unaltered by this proposed project modification.

2.3 Format of the EIR

Pursuant to the CEQA Guidelines Section 15120(c), this EIR Addendum contains the information and impact analysis required by Sections 15122 through 15131. The format for this EIR Addendum is described below.

Section 1.0 EXECUTIVE SUMMARY

This Section contains an Executive Summary of the project description and all environmental issue analysis (Sections 4.0 through 4.2), listing all significant project impacts, mitigation measures recommended to reduce any significant impacts, and the level of significance after mitigation.

Section 2.0 INTRODUCTION

This Section contains a brief project summary, a discussion of the purpose and intended use of this EIR Addendum, areas of controversy known to the Lead Agency (including issues raised by the public), and documents incorporated by reference.

Section 3.0 PROJECT DESCRIPTION

This Section provides a description of the development history of the Rancho Los Cerritos project site, a summary of major events in this development history, a description of the previous environmental documents certified for this project and a description of the Master Plan modification proposal.

Section 4.0 ANALYSIS OF ENVIRONMENTAL ISSUES

This Section discusses the Initial Study Checklist findings, which identified all environmental factor significance thresholds for the proposed Master Plan modification that could result in either a Potentially Significant Impact or a Less Than Significant Impact With Mitigation Incorporation, and provides a discussion of the Effects Not Found To Be Significant for each environmental factor.

Sections 4.1 and 4.2

These Sections provide an analysis of the modified project's potential environmental impacts for Land Use and Planning (4.1) and Traffic, Circulation and Parking (4.2).

For each environmental factor, an Existing Conditions discussion is provided pursuant to CEQA Guidelines Section 15125 to describe the current physical environmental setting on the project site and the project vicinity as these conditions pertain to the environmental issues. The potential project impacts are then identified in relation to the significance thresholds set forth in the Initial Study and analyzed for level of significance in accordance with CEQA Guidelines Section 15126.2. When appropriate, mitigation measures are identified and the level of impact significance after mitigation is discussed pursuant to CEQA Guidelines Section 15126.4.

Section 5.0 SIGNIFICANT UNAVOIDABLE IMPACTS

This Section identifies any adverse environmental impacts which cannot be mitigated to a less than significant level pursuant to CEQA Guidelines Section 15126.2(b).

Section 6.0 SIGNIFICANT IRREVERSIBLE CHANGES

In accordance with CEQA Guidelines Section 15126.2(c), this Section discusses the use of nonrenewable resources and irretrievable commitments of resources should the proposed modification to the Rancho Los Cerritos project be implemented.

Section 7.0 GROWTH INDUCING AND CUMULATIVE IMPACTS

This Section discusses ways in which the modified Phase II project proposal could foster economic or population growth, either directly or indirectly, in the surrounding environment pursuant to CEQA Guidelines Section 15126.2(d). This Section also discusses cumulatively considerable impacts as set forth in CEQA Guidelines Section 15130. Since this is an EIR Addendum, only the new cumulatively considerable impacts resulting from the modification proposal need be considered. All other cumulative impacts have already been fully discussed and considered in the previous 2002 EIR (EIR 25-99) for the Rancho Los Cerritos Master Plan.

Section 8.0 PROJECT ALTERNATIVES

In accordance with CEQA Guidelines Section 15126.6, this Sections describes a reasonable range of project alternatives that could feasibly attain most of the basic project objectives but avoid or substantially lessen any of the significant project impacts. Since this is an EIR Addendum, this Section will briefly discuss the project alternatives previously analyzed and address the need for additional alternatives.

Section 9.0 CONTACTS, PREPARERS AND REFERENCES

This Section identifies all organizations and persons contacted during preparation of this EIR Addendum, the EIR preparers and technical report authors, and all references used in this EIR Addendum.

APPENDICES

Appendix A provides the Mitigation Monitoring Program, setting forth all mitigation measures recommended in this EIR Addendum along with the project monitoring phase, enforcement agency and monitoring agency for each mitigation measure.

Appendix B contains a copy of the Initial Study Checklist used to identify potentially significant impacts for analysis in this EIR Addendum.

2.4 Incorporation by Reference

This EIR represents an addendum to the previously certified EIR and is considered an addition to the previous project environmental review documentation. In accordance with CEQA Guidelines Section 15150, this EIR Addendum incorporates by reference the original certified 2002 EIR for the Rancho Los Cerritos Master Plan (EIR No. 25-99, State Clearinghouse No. 99148658). Copies of all documents incorporated by reference are available for public review at the Long Beach City Hall address listed in Section 2.1 of this document.

SECTION 3.0
PROJECT DESCRIPTION

The proposed project involves a modification to the previously approved Rancho Los Cerritos Master Plan. This modification would eliminate the proposed eight space staff parking lot that was to be constructed in the northeastern corner of the Rancho site. These eight spaces would be replaced by continuous use of at least eight parking spaces in the neighboring Virginia Country Club parking lot.

3.1 Project Site Development History

Rancho Los Cerritos is located at 4600 Virginia Road, adjacent to the Virginia Country Club near the intersection of San Antonio and Long Beach Boulevard. Entry to the Rancho is on Virginia Road north of the Virginia Country Club entrance.

The Rancho is a National, State and Local Historic landmark owned and operated by the City of Long Beach since 1955 as a public museum and historic monument. The two story house was originally constructed in 1844 as part of what was once a 27,000 acre cattle ranching operation. The ranch house, built with two and three foot thick walls from sun-dried adobe, blended traditional Spanish/Mexican features with attributes of the Monterey style of architecture. The approach to this house was through a large gate in a high adobe wall that enclosed the 140 foot long central courtyard.

The property was sold in 1866, initially for use as a sheep ranch, and then was gradually subdivided throughout the nineteenth century for various dairy farm, crop production and residential uses. The ranch house was renovated for use as a private residence in 1930-31 under the guidance of architect Kenneth S. Wing. The renovation followed the Spanish Colonial Revival architectural style, with red-tiled roofing, courtyard landscaping and a sunporch, while leaving the original building configuration intact.

Beginning in 1943, the City of Long Beach began working to acquire the Rancho as a historic site, exercising a purchase option in October 1955. The City currently administers and maintains the site through the Department of Parks, Recreation and Marine.

The Friends of Rancho Los Cerritos are a volunteer support group which assists the Rancho with its public programming and supports the educational and preservation mission of the Rancho. The Friends organization provides volunteer support through an active docent program. Support of their activities comes primarily through donations, membership dues, special events admissions and the museum shop sales.

The Rancho Los Cerritos Foundation was established in 1994 and received tax-exempt status in 1996. As the fund raising and development organization for the Rancho, it provides funding for the Rancho Los Cerritos Master Plan, which is a long range development plan for improvements through the year 2024.

The City of Long Beach will continue to support the Rancho's maintenance needs, daily operations, seismic retrofit work, security and safety improvements, and Americans with Disabilities Act (ADA) upgrades. In partnership with the City, the Rancho Los Cerritos Foundation will take the lead in raising private, corporate, and foundation funds for restoration, new construction including associated archaeological work, interpretive programming initiatives and other enhancements.

3.2 Rancho Los Cerritos Master Plan

The Rancho Los Cerritos Master Plan is the principle long-range planning document that brings together findings of supporting studies and research to present an integrated and phased implementation program. The supporting studies involved the interpretive plan and the design recommendations which are inclusive of the site, historic structures, programming and implementation concepts. A conceptual Site Plan for this approved Master Plan is shown in Figure 3-1.

The Master Plan time frame was divided into three major phases: Phase I, 2001-2004; Phase II, 2005-2014; and Phase III, 2015-2024. The general sequence of improvement actions as described in the original 2002 EIR are listed below.

Phase I (2001-2004)

1. Install an eight foot high perimeter black vinyl chain link fence to be hidden by landscaping. The landscaping would provide visual screening from the neighboring properties.
2. Plant new landscaping along the chain link perimeter fencing.
3. Install a new fire hydrant on-site and fire alarm system within the historic Ranch House adobe building.
4. Install an adequate security system for the interior of the Ranch House.
5. Provide off-site directional signage to the Rancho.
6. Restore inner courtyard area.

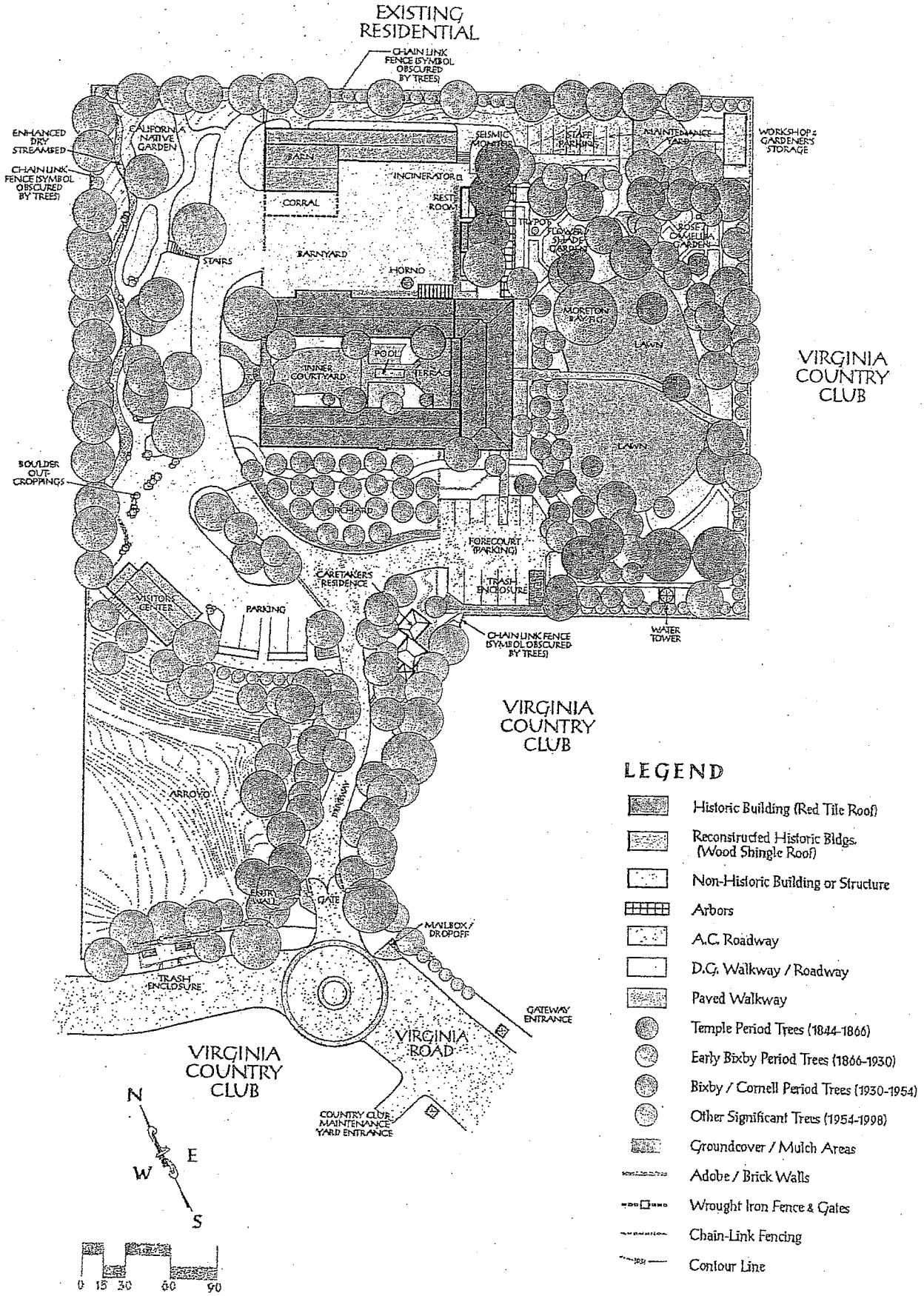


Figure 3-1
Approved Master Plan

Phase II (2005-2014)

1. Construct new entrance gate, fencing, mailbox, community refuse shelter and paving at the Virginia Road entry.
2. Construct new Visitor Center and attached restroom facilities (Cota adobe).
3. Reconfigure parking/forecourt for visitor's parking. Relocate refuse shelter to southeast section of visitor's parking area.
4. Construct Caretaker's Residence.
5. Construct new parking, driveway and gate control on-site.
6. Construct new interpretive signage along entrance roadway adjacent to the arroyo.
7. Install a site perimeter security system and expand the security system to the new structures.
8. Provide temporary parking area for staff at the rear maintenance yard.
9. Begin limited upgrade for compliance with ADA accessibility requirements for the adobe Ranch House building, with special attention to the north wing.
10. Improve accessibility throughout the site.
11. Plant the orchard garden.
12. Improve landscaping in the arroyo.
13. Plant the areas outside the brick courtyard walls on the Virginia Country Club side.
14. Repair the brick wall around the garden.
15. Rehabilitate the present Visitor Center (gift shop/garage) for classroom use.
16. Restore the interior of the east wing and south wing and restore the kitchen for the new interpretive program.
17. Install the ADA lift at the classroom area for access to the verandahs and Ranch House.

Phase III (2015-2024)

1. Provide Historic American Building Survey drawings for Cornell's hedge and lawn area to the north of the servant's quarters.
2. Demolish Cornell's hedge and lawn area, concrete parking pad and other features north of the Rancho.
3. Demolish existing herb garden.
4. Construct new barn complex consisting of staff offices, library, archives, collection, meeting area and restrooms.
5. Demolish the 1980s restroom facilities.
6. Construct new toilet building adjacent to 1930s Gardener's House.
7. Reconstruct Cornell's garden design to the south of the lawn area.
8. Reconstruct new barnyard for special events including fencing, ramada, horno, and other associated features.
9. Construct new staff parking near maintenance yard.

10. Construct workshop/gardener's storage structure.

The following improvements for Rancho Los Cerritos were completed during 2002 (Source: Ellen Calomiris, Historic Sites Officer, City of Long Beach Department of Parks, Recreation and Marine, 11/02/06 communication):

1. Seismic retrofit of the adobe Ranch House.
2. Repair of the adobe Ranch House tile roof and exterior woodwork.
3. Repainting of Ranch House exterior.
4. ADA accommodations throughout the ground level and inner courtyard of Ranch House.
5. Replanting the orchard garden.

3.3 Proposed Phase II Project

Upon proceeding with the design plans for the Phase II improvements, it was determined that the proposed location of the access road connecting the staff parking lot to the main interior on-site roadway created significant engineering challenges due to the steep slope of the access road area. In addition, the close proximity and lower elevation of neighboring residential properties to the north of the proposed staff parking lot would require a sound barrier to prevent noise intrusions and a retaining wall to prevent erosion impacts. For these reasons, the Rancho has decided to request, as part of its Phase II entitlement application, a modification to the Master Plan allowing off-site staff parking in the Virginia Country Club parking lot areas in lieu of the on-site staff parking lot.

In 2005, Rancho Los Cerritos filed for Conceptual Site Plan Review with the Department of Planning and Building (Case No. 0501-18) to proceed with implementation of the Phase II Master Plan improvements for a 2,900 square foot Visitor Center building and an 850 square foot Caretaker's Residence. This Conceptual Site Plan Review application also included a request to provide staff parking off-site at the Virginia Country Club in lieu of providing an on-site eight space staff parking lot. A Notice of Final Action was issued on March 2, 2005 instructing the Rancho to proceed with applications for Site Plan Review approval from the Planning Commission and approval of a Certificate of Appropriateness from the Cultural Heritage Commission.

On October 24, 2006, the Rancho filed an application (Case No. 0610-29) for the following Phase II improvements:

1. Modification of the Master Plan to eliminate the on-site staff parking lot from the project design, with at least eight off-site staff parking spaces to be provided in the Virginia Country Club parking lot areas.

2. Construction of a 2,900 square foot Visitor Center building with a design based on the pre-1834 Cota adobe using stabilized adobe bricks. This building will be located on a portion of what is now the southwestern parking lot at the top of the arroyo, with the lower level built into the hillside and not visible from the front public access area. Structural components will include reinforced concrete columns, in-filled with 24 inch thick adobe walls with plastering, and wood shingle roofing to match the original construction based on historic photographs. The Visitor Center will provide an orientation exhibit, museum, gift shop, changing gallery space, a video theater, costume storage, public restrooms, and two offices.
3. Construction of an 850 square foot Caretaker's Residence at the eastern side of the entry drive. This building will contain the entry gate monitoring equipment and the site security system. Dense plantings will surround this structure to minimize its presence.
4. A new wrought iron gate, monument wall and signage, interlocking brick pattern outside the gates, an upgraded security system, and an iron fence along the southern perimeter for improved site security and aesthetic appeal. Landscaping upgrades will be included to utilize the 1931 plant palette and additional California native plant species.
5. Removal of the 1950s City-added asphalt parking lot, to be partially replaced with decomposed granite and four disabled parking spaces. The remaining area of the demolished parking lot will be landscaped with California native plant species extending to the northwest corner of the site to create a California native Garden
6. Demolition of the 1980s-era public restrooms following construction of new public restrooms in the Visitors Center.

Figure 3-2 provides a Site Plan showing the modified Phase II proposal.

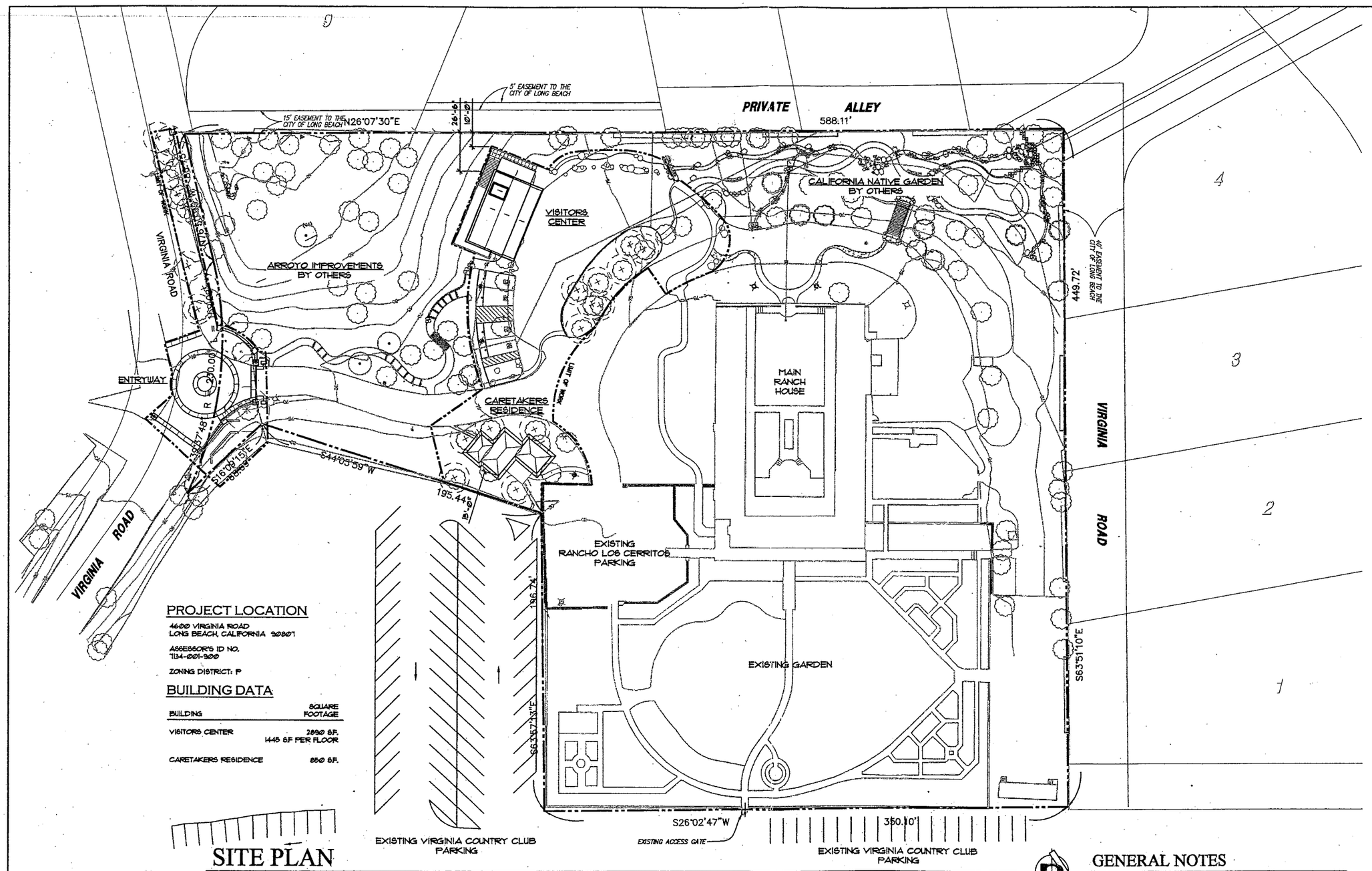
3.4 Previous Environmental Review Documents

The 2002 EIR (EIR No. 25-99, State Clearinghouse No. 99148658) was prepared for the Rancho Los Cerritos Master Plan project as described in Section 3.2 of this EIR Addendum. This EIR was certified by the Long Beach Planning Commission on April 18, 2002.

In accordance with CEQA Guidelines Section 15124, a statement of the project goals and objectives was provided in the Executive Summary of the 2002 EIR. The goals of the Master Plan are to:

1. Conserve those areas and characteristics of the Rancho site that remain intact from the historic time periods; and
2. Restore and maintain the remainder of the site to reflect the general image and character of those time periods.

Figure 3-2
Proposed Master Plan Modification



HERITAGE
ARCHITECTURE & PLANNING
625 BROADWAY SUITE 600
SAN DIEGO CALIFORNIA 92101
(619) 239-7005 FAX (619) 234-6296

PROJECT LOCATION

4600 VIRGINIA ROAD
LONG BEACH, CALIFORNIA 90807

ASSESSOR'S ID NO.
7134-001-900

ZONING DISTRICT: P

BUILDING DATA

BUILDING	SQUARE FOOTAGE
VISITORS CENTER	2890 S.F. 1445 S.F PER FLOOR
CARETAKERS RESIDENCE	850 S.F.

SITE PLAN

SCALE 1"=30'-0"

0 10' 25' 50'

REFERENCE

GENERAL NOTES

1. REFER TO CIVIL AND LANDSCAPE DRAWINGS FOR EXISTING CONDITIONS, DEMOLITION, AND SITE IMPROVEMENTS.

OCTOBER 10, 2006

LICENSED ARCHITECT
PAUL DAVID MARSHALL
C-24785
3-31-07
REN.
STATE OF CALIFORNIA

SECTION HEAD	
PROJECT MANAGER	
INSPECTION	
SURVEY CONTROL	
PROPERTY LINES	
GAS	
WATER	
SUBSTRUCTURES	

APPROVALS

DIVISION ENGINEER ____ DATE ____
CONSTRUCTION SERVICES OFFICER ____ DATE ____
CITY TRAFFIC ENGINEER ____ DATE ____
DIRECTOR OF PARKS, RECREATION AND MARINE DEPT. ____ DATE ____
CITY ENGINEER ____ DATE ____

CITY OF LONG BEACH
DEPARTMENT OF PUBLIC WORKS
OFFICE OF THE CITY ENGINEER
333 W. OCEAN BLVD. LONG BEACH, CA 90802

DESIGNED BY:	X.XXXXX
DRAWN BY:	X.XXXXX
DESIGN CHECK BY:	
DRAFTING CHECK BY:	
FIELD BOOK	
PAGE	

RANCHO LOS CERRITOS
ENTRYWAY • VISITORS CENTER • CARETAKERS RESIDENCE
4600 VIRGINIA ROAD LONG BEACH CA 90807

REVISIONS				
No.	DATE	SHEET	APPROVAL	
AS-BUILT:				

NO. R- XXXX
JOB NO. PWXXXX XX
SHEET A1.1 OF --
DRAWING NO. X-XXXX

The primary objectives of the Master Plan are as follows:

1. Conduct, encourage, produce and share scholarly research on the history of Rancho Los Cerritos;
2. Collect, preserve and manage appropriate authentic artifacts;
3. Develop innovative and effective interpretive programs on Rancho Los Cerritos history;
4. Supplement the teaching of local and Southern California history in the classroom;
5. Encourage local history instruction in the schools and colleges; and
6. Expand resources and increase accessibility of the archives, research files and research library.

3.5 Current EIR

This EIR is an Addendum to the 2002 EIR referenced in Section 3.4. Pursuant to CEQA Guidelines Section 15164(a), the lead agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions requiring preparation of Subsequent EIR as set forth in CEQA Guidelines Section 15162 have occurred. A Subsequent EIR would be required if one or more of the following conditions do occur:

1. Substantial changes are proposed in the project which require major revisions to the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
2. Substantial changes have taken place with respect to the circumstances under which the project is undertaken which will require major revisions to the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified, shows any of the following:
    - one or more significant effects not discussed in the previous EIR;
    - significant effects previously analyzed will be substantially more severe than shown in the previous EIR;
    - mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects; and/or
    - mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects.

In accordance with CEQA Guidelines Section 15164(e), the following is a brief explanation of the decision not to prepare a Subsequent EIR pursuant to Guidelines Section 15162. Substantial evidence supporting this decision is provided in Sections 4.0 through 4.2 of this EIR Addendum.

The project modification would result in elimination of a previously approved eight space on-site staff parking lot and provision of at least eight off-site staff parking spaces in the existing Virginia Country Club parking area. No other substantial changes to the project description analyzed in the original 2002 EIR are proposed for this modification.

There have also been no substantial changes to the circumstances under which the project would be undertaken. The Rancho Los Cerritos project site remains the same size, location and land use as it was at the time of the 2002 EIR, and the surrounding properties have not experienced any substantial changes.

In addition, no new information of substantial importance has come forward that would alter the significance analysis, mitigation measures or alternatives provided in 2002 EIR. Therefore, the project modification in the current environmental setting would not require a Subsequent EIR and an Addendum to the 2002 EIR may be prepared for the project modifications.

CEQA Guidelines Section 15164(c) states that an EIR Addendum need not be circulated for public review but can be included in or attached to the final EIR. This EIR Addendum is considered part of the 2002 EIR and has not been circulated for separate public review since there are no substantial changes or new significant information not previously analyzed in the 2002 EIR. Pursuant to CEQA Guidelines Section 15164(d), this EIR Addendum shall be considered by the Planning Commission (and City Council if the Planning Commission decision is appealed) prior to making a decision on the project modification.

3.6 Discretionary Actions

Pursuant to CEQA Guidelines Section 15124, agencies expected to use this EIR Addendum in their decision-making process could include the Long Beach Planning Commission, the Long Beach City Council (on appeal), the California Department of Transportation, the Metropolitan Transportation Authority, and the South Coast Air Quality Management District. Use of this EIR in an agency's decision-making process does not confer any approval or permit authority not previously granted to such agency by law.

The following is a list of discretionary approvals by the City of Long Beach (Lead Agency) and Responsible Agencies:

City of Long Beach Planning Commission

- Site Plan Review approval (for construction of the Visitor's Center and Caretaker's Residence)
- Standards Variance approval (for elimination of the on-site staff parking lot)
- Administrative Use Permit (for joint use of the Virginia County Club parking facilities)

City of Long Beach City Council

- On Appeal of Planning Commission Site Plan Review approval only

Required non-discretionary (ministerial) City permits/approvals involve grading permits and building permits to allow site preparation and construction. The Phase II improvements would also include site preparation, grading, trenching, installation and connection of project utilities into the public utilities systems.

SECTION 4.0
ANALYSIS OF ENVIRONMENTAL ISSUES

This chapter contains impact analysis sections for the environmental factors that could experience potentially significant project impacts, based on the Initial Study findings. Each environmental factor section includes a description of the environmental setting, analysis of potential project impacts, and mitigation measures, if determined necessary to reduce identified potential impacts.

4.0-1 Original EIR for Rancho Los Cerritos Master Plan Project

An EIR (EIR No. 25-99, State Clearinghouse No. 99148658), hereinafter referred to as the 2002 EIR, was prepared for the Rancho Los Cerritos Master Plan project and made available for a 45-day public review period from February 1, 2002 to March 18, 2002. The Long Beach Planning Commission certified this EIR on April 18, 2002 and the Notice of Determination was filed with the Los Angeles County Clerk on April 23, 2002. This 2002 EIR is incorporated by reference into this EIR Addendum.

Per CEQA Guidelines Section 15164, no additional public review circulation is required for this EIR Addendum.

4.0-2 Initial Study for EIR Addendum

The Initial Study Environmental Checklist was prepared for this EIR Addendum and is included as Appendix B. For each Threshold of Significance listed in this Initial Study, one of a possible four determinations was made: the proposed project modification would either have a Potentially Significant Impact, Less Than Significant Impact With Mitigation Incorporation, Less Than Significant Impact, or No Impact. Any Threshold of Significance where the project modification could have either a Potentially Significant Impact or a Less Than Significant Impact With Mitigation Incorporation is subject to further CEQA analysis in Sections 4.1 through 4.2 of this EIR Addendum. Potential impacts that fall under either the Less Than Significant Impact or No Impact determination are discussed under 4.0-3 Effects Found Not To Be Significant.

A breakdown of all Thresholds of Significance in which the proposed project modification could have impacts at either the Potentially Significant Impact or Less Than Significant With Mitigation Incorporation level are provided below:

Potentially Significant Impact

It has been determined in the Initial Study that this Master Plan modification would not result in a Potentially Significant Impact for any of the Thresholds of Significance.

Less Than Significant With Mitigation Incorporation

The proposed modification would result in potentially significant impacts involving the following Thresholds of Significance, which could be reduced to a Less Than Significant Level with Mitigation Incorporation:

IX. Land Use and Planning:

b) The project could conflict with an applicable land use plan, policy, or regulation of any agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

XVI. Transportation/Traffic

f) The project could result in an inadequate parking capacity.

4.0-3 Effects Found Not To Be Significant

As required by CEQA Guidelines Section 15128, an EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR. Previous determinations from the 2002 EIR are also summarized below.

The Initial Study (Appendix B) determined the following environmental effects of the proposed modification would be at a less than significant level:

Aesthetics

Potential visual resource and aesthetics impacts were analyzed in Section 6.I. Aesthetics in the 2002 EIR, which states on page 43 that the Rancho Los Cerritos site is designated as a City historic resource as well as a National and State Historic Landmark and is on the National Register of Historic Places. The Master Plan project as originally proposed would not demolish or visually alter any of the historically significant buildings or garden areas on the project site.

The Impact analysis from the 2002 EIR stated on page 44 that the Rancho Los Cerritos Master Plan guidelines for alterations, additions and repairs for preserving the character of the site were based on the Secretary of the Interior's Standards for Rehabilitation & Illustrated Guidelines for Rehabilitating Historic Buildings, published in 1991 by the National Park Service.

Mitigation Measures were set forth on page 45 of the 2002 EIR to: 1) establish a dense vegetation buffer along the entire perimeter of the project site and along both sides of the driveway entrance; and 2) require all new project site structures to conform with the Institutional (I) zoning district setback and building height development standards. After incorporation of these Mitigation Measures, the 2002 EIR determined that project impacts would not result in any significant unavoidable adverse impacts.

The modification proposal to eliminate the on-site staff parking lot and provide the eight staff parking spaces off-site in the Virginia County Club parking area would not result in any new adverse aesthetics impacts.

The off-site provision of staff parking would not have a substantial adverse effect on a scenic vista since the project modification would retain the on-site area originally planned as a staff parking lot in its existing condition as part of the garden area.

Preserving the garden area rather than constructing impervious parking surfaces would not result in substantial damage to scenic resources, degrade the existing visual character or quality of the site and its surroundings, or create a new source of substantial light or glare.

Since the 2002 EIR mitigations resulted in no significant adverse impacts and the proposed modification would not result in any new adverse impacts, no additional CEQA analysis is required.

Agriculture Resources

The Rancho Los Cerritos project site is located in an urbanized area of Long Beach and is not located within an agricultural zone. Since there are no agricultural zones or agricultural resources anywhere in or nearby the project site vicinity, the proposed project modification will have no effect on any agricultural resources. The Initial Study determined the project would have No Impact on any of the thresholds of significance related to agricultural resources (see page 9 of the Initial Study Checklist) and therefore no further CEQA analysis is necessary.

Air Quality

The original project air quality impact analysis is included in the 2002 EIR (pages 47-54), which set forth a total of 14 Mitigation Measures to protect the surrounding residential properties from construction-related air quality impacts, reducing construction impacts to a less than significant level. Based on the CEQA Air Quality Handbook, the 2002 EIR determined that project operational air quality impacts would not be significant.

The Initial Study for this modification proposal determined that there would not be any new significant adverse air quality impacts (see pages 9-10 of the Initial Study Checklist). Providing staff parking in an existing Virginia Country Club parking area rather than constructing a new parking area would not create any short-term construction impacts, conflict with or obstruct implementation of any air quality plans, violate existing air quality standards, substantially contribute to an existing or projected air quality violation, result in a cumulatively considerable net increase of any criteria pollutant, expose sensitive receptors to substantial pollutant concentrations, or create objectionable odors affecting a substantial number of people. Since the 2002 EIR mitigations resulted in no significant adverse impacts and the proposed modification would not result in any new adverse impacts, no additional CEQA analysis is required.

Biological Resources

The 2002 EIR concluded on page 56 that after mitigation to limit construction activities to areas where no bird nest destruction or damage could occur, the Master Plan project would not result in any significant adverse impacts to biological resources. The project modification would result in retaining the northeastern portion of the project site in its natural, undisturbed state rather than construction of a staff parking lot. Since the 2002 EIR mitigations resulted in no significant adverse impacts and the Initial Study for this EIR Addendum determined there would be no new impacts for any of the applicable thresholds of significance for biological resources (pages 10-11), no further CEQA analysis would be required.

Cultural Resources

The cultural resources impact analysis in the 2002 EIR (pages 57-64) provided a total of 10 Mitigation Measures to ensure conformity with all applicable standards for protection of historic buildings as well as protecting any archaeological or paleontological resources discovered during construction activities. After mitigation, the 2002 EIR determined that the project would not result in any significant adverse impacts.

The Initial Study for this EIR Addendum determined the project modification to utilize existing Virginia Country Club parking facilities rather than construct a new

staff parking lot would not result in any substantial adverse changes to the significant historic or archaeological resources, impact paleontological resources or disturb any human remains. Since the 2002 EIR mitigations resulted in no significant adverse impacts and the Initial Study for this EIR Addendum determined the modification would not create any new significant adverse impacts (page 11), no additional CEQA analysis is required.

Geology and Soils

The 2002 EIR determined on page 65 that the Master Plan project would not result in any significant adverse impacts. Project development and construction must conform to the seismic design provisions of the current Uniform Building Code. The Initial Study for this EIR Addendum (pages 11-12) determined there would be no new significant adverse geological impacts.

No faults are known to pass beneath the project site, and the site is not in the Alquist-Priolo Special Studies Zone. The most significant fault system in the vicinity is the Newport-Inglewood fault zone. The relative close proximity of this fault could create substantial ground shaking anywhere in the project vicinity if a seismic event occurred in the future. However, there are numerous variables that determine the level of damage to any particular location. Given these variables, it is not possible to determine the level of damage that may occur on the site during a seismic event. Since no significant adverse impacts were identified in the 2002 EIR or the EIR Addendum Initial Study Checklist, no further CEQA analysis is required.

Hazards and Hazardous Materials

As stated on page 66 of the 2002 EIR, there are no underground fuel storage tanks and no oil extraction has ever been done on the project site. While lead paint was found on the Ranch House, removal had already been underway by the time of the 2002 EIR.

The modification would not result in any new or altered construction activities, but rather would eliminate the on-site staff parking lot and the associated potential for parking lot construction or operational accidents. Since the 2002 EIR determined there would be no adverse environmental impacts from Master Plan implementation and the modification would not result in any new or intensified hazards, no further CEQA analysis is necessary.

Hydrology and Water Quality

The project site is not within a flood hazard zone. According to the latest Flood Zone map for the City of Long Beach (Source: Federal Emergency Management Agency, January 11, 2002), this site is located in Zone X, which is an area determined to be outside the 500-year flood plain.

The project is within a highly urbanized area with stormwater drainage infrastructure in place in the project site vicinity. The 2002 EIR states on page 67 that the project site is covered with approximately 25% impermeable surfaces. While construction of the Master Plan improvements would add approximately 4,560 square feet of impermeable surfaces, since most of the City added parking lot will be replaced with decomposed granite there would be no net increase of impermeable surfaces. Four mitigation measures were included in the 2002 EIR to ensure no significant adverse impacts related to hydrology.

The project modification would eliminate the proposed eight space paved staff parking area and leave this parking lot site in its currently natural state with no impermeable surfacing. This modification would therefore reduce the amount of impermeable surfaces previously approved for the project site. Since the original 2002 EIR mitigations resulted in no significant adverse impacts and the proposed modification would not result in any new adverse impacts, no additional CEQA analysis is required.

Land Use and Planning

Potential land use and planning project impacts were analyzed in the 2002 EIR on pages 69-71. Two Mitigation Measures were set forth in this original EIR, requiring on-site storage for all construction equipment and materials and also requiring construction workers to park their vehicles on-site. No significant adverse impacts were anticipated with implementation of these Mitigation Measures.

The proposed project modification to eliminate the on-site staff parking lot would not physically divide an established community or conflict with any applicable habitat conservation plan or natural community conservation plan. However, the modification would conflict with a local land use regulation regarding the provision of code required on-site parking spaces. Expansion of the Rancho under the approved Master Plan would have required an additional 90 on-site parking spaces under the Zoning Code. Prior to Master Plan approval, the Rancho had 34 on-site parking spaces. The Master Plan reduced this on-site parking supply by 10 spaces for a total of 24 on-site spaces in order to provide more open space and accommodate the Visitors Center. The proposed modification would eliminate the eight space staff parking lot, further reducing the on-site parking supply (see Transportation below for further discussion of the modification parking impact). Analysis of this land use threshold impact is provided in Section 4.1 of this EIR Addendum.

Mineral Resources

Traditionally, the primary mineral resource within the City of Long Beach has been oil. From the beginning of this century, oil extraction operations within the

City have diminished as this resource has become depleted due to these extraction operations. Today oil extraction continues but on a much reduced scale in comparison to that which occurred in the past. There are no other known mineral resources on the site that could be negatively impacted by the project modification.

Mineral resources were not analyzed in the 2002 EIR. The Initial Study for this EIR Addendum (page 14) found that this proposed project modification would have no impacts on mineral resources and therefore no further CEQA analysis is necessary.

National Pollution Discharge Elimination System (NPDES)

This environmental factor was analyzed under the Hydrology section of the 2002 EIR, which required as a Mitigation Measure that the applicant obtain a National Pollution Discharge Elimination System permit prior to approval of building permits.

The Initial Study for this EIR Addendum (page 14) found that the project modification's potential to result in a significant loss of pervious surface would be Less Than Significant since elimination of the previously approved staff parking lot would actually increase the amount of permeable area (natural ground cover) on the project site. Since the 2002 EIR mitigations resulted in no significant adverse impacts and the proposed modification would not result in any new adverse impacts, no additional CEQA analysis is required.

Noise

Potential noise impacts were analyzed in the 2002 EIR on pages 72-74. Five Mitigation Measures were set forth on page 73 to ensure project construction activities would not create noise disturbances to the surrounding residential properties.

The Initial Study for this EIR Addendum concluded that the project as modified would not result in any significant noise impacts. All significance thresholds for noise were determined to be at a No Impact or Less Than Significant Impact level (see pages 14 and 15 of the Initial Study Checklist). Project construction impacts would be subject to all applicable City Noise Regulations (Chapter 8.80 of the Long Beach Municipal Code). Since the original 2002 EIR mitigations resulted in no significant adverse impacts and the proposed modification would not result in any new adverse impacts, no additional CEQA analysis is required.

Population and Housing

The 2002 EIR concluded on page 75 that the project would not result in any unavoidable significant impacts to either population or housing. The project

would not significantly change the number of dwelling units on the project site, adding only a caretakers residence, and would not impact the housing supply or population in the surrounding area. The modification to eliminate the staff parking lot would not have any population or housing impacts and therefore no further CEQA analysis is necessary.

Public Services

The 2002 EIR concluded that the original project would not have any significant adverse public service impacts. Similarly, elimination of the staff parking lot would not create any new adverse public service impacts (see page 15 of the Initial Study checklist) and therefore no further CEQA analysis is necessary.

Recreation

Recreation impacts were not analyzed in the 2002 EIR. The Initial Study Checklist for this EIR Addendum determined that the project modification would not result in any significant adverse impacts to recreational resources (see page 16) and therefore no further CEQA analysis is necessary.

Transportation/Traffic

As discussed under Land Use and Planning above, the modified project would reduce the supply of on-site parking analyzed under the 2002 Master Plan. Since the Master Plan provided less than the 90 additional on-site spaces required by the Zoning Code, this was an unavoidable significant adverse impact that required adoption of a Statement of Overriding Considerations as part of the original project approval. The modification would further reduce the supply of on-site parking from 24 to 16 spaces with the elimination of the eight space staff parking lot. Analysis of this parking capacity environmental threshold impact is provided in Section 4.2 of this EIR Addendum. As shown on page 16 of the Initial Study checklist for this EIR Addendum, all other potential transportation and traffic impacts for this project modification were determined to be at a No Impact or Less Than Significant Impact level.

Utilities and Service Systems

The 2002 EIR determined on page 86 that no significant adverse impacts to utilities were anticipated and no mitigation measures were required. The Initial Study for this EIR Addendum concluded on pages 16-17 that the modified project would be at a No Impact level for all significance thresholds on utilities and service systems. Therefore no additional CEQA analysis is necessary.

SECTION 4.1
LAND USE AND PLANNING

4.1.1 Existing Conditions

Existing Regulatory Setting

GENERAL PLAN

The project site is located in Land Use District (LUD) No. 11; Open Spaces and Parks.

Land uses in LUD No. 11 should serve the overall purpose of promoting mental and physical health of the urban citizenry through land uses that include public parks and should be distributed so that all citizens, regardless of race, age, handicapped condition, sex or socio-economic class, have access to the opportunity for the enhancement of health through contact with such natural environments. There are to be rigid constraints on the amounts and types of urban forms and structures that are permitted to invade open spaces and parks.

No changes to LUD No. 11 have been instituted since certification of the 2002 EIR and the Rancho land uses remain consistent with this General Plan land use designation.

ZONING

The project site is in the Park (P) zoning district.

The park district is intended to set aside and preserve publicly owned natural and open areas for active and passive public use for recreational, cultural and community service activities. Parks are established to promote the mental and physical health of the community and provide physical and psychological relief.

The Park district specifically includes cultural and educational uses such as museums, ranchos and natural centers as permitted land uses in the Park district. The Rancho is therefore a permitted land use for this zoning district.

4.1 2 Project Impacts

The Master Plan modification would be considered to have a significant impact on land use and planning if the project would exceed any of the following thresholds of significance:

a. The project would physically divide an established community;

b. The project would conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect;

c. The project would conflict with any applicable habitat conservation plan or natural community conservation plan.

The Initial Study (Appendix B) determined that the project would have no significant impacts in regard to thresholds a. and c. above. However, the project as proposed would conflict with the one of the previously approved Master Plan design elements (on-site staff parking lot).

In order to allow the proposed off-site staff parking in the abutting Virginia Country Club parking lot, the Rancho must obtain approval by the City for a Standards Variance and Administrative Use Permit.

The Standards Variance approval request would permit a specific reduction in the supply of previously approved on-site parking spaces. Prior to Master Plan approval, the Rancho was considered legal non-conforming for the provision of on-site parking required under the Zoning Code. This "grandfathered" status meant that since the Rancho was in compliance with applicable parking standards at the time the land use was originally legally established, it is exempt from current parking code requirements. As stated on page 83 of the 2002 EIR, the Rancho's Master Plan reduced on-site parking from the existing 34 spaces to 24 spaces in order to provide more open space and better accommodate the Visitors Center. This approved 24 space parking supply included the eight space staff parking lot, and therefore the project modification would result in a total of 16 on-site spaces. This reduction from 24 to 16 spaces would require Standards Variance approval.

The Administrative Use Permit approval request would allow shared use of the Virginia Country Club parking lot pursuant to Zoning Code Section 21.41.223 Joint Use of Parking Facilities. This Code section states that when two or more land uses share a parking facility, the parking requirement may be reduced through approval of an Administrative Use Permit. A discussion of existing parking demands by the Virginia Country Club is provided in Section 4.2 Traffic, Circulation and Parking of this EIR Addendum.

Site Plan Review approval is also requested by the Rancho as part of their Phase II implementation of the Master Plan for construction of the Visitors Center and Caretakers Residence. The Site Plan Review process is intended to ensure that the highest quality of land planning and design standards are incorporated into development projects, to ensure that new projects are compatible with existing neighborhoods in terms of scale, style and construction materials, and to ensure the maintenance, restoration, enhancement and protection of the

environment. Project design features have already been analyzed in the 2002 EIR and no changes in Master Plan design are proposed in this modification. Therefore, no further analysis of project design and the Site Plan Review process are necessary.

4.1.3 Mitigation Measures

While the Rancho land use is consistent with the City's General Plan and Zoning Code, the project modification proposal would conflict with the previously approved Master Plan by eliminating the on-site staff parking lot. This modification would require approval of a Standards Variance for reducing the previously approved number of on-site parking spaces as well as approval of an Administrative Use Permit for joint use of the Virginia Country Club parking lot for both the Country Club and Rancho uses. Therefore, the following mitigation measure is recommended:

Mitigation Measure 4.1.1: Standards Variance and Administrative Use Permit Approvals

The applicant shall obtain City approval of the requested Standards Variance and Administrative Use Permit to eliminate the previously required on-site staff parking lot and allow use of the existing Virginia Country Club parking lot OR revise the project design features to provide a minimum eight space on-site staff parking lot.

Monitoring Phase: Prior to issuance of any project building permits

Enforcement Agency: Department of Planning and Building

Monitoring Agency: Department of Planning and Building

It is anticipated that any potential impacts related to land use will be reduced to a less than significant level with mitigation incorporation.

SECTION 4.2
TRAFFIC, CIRCULATION AND PARKING

4.2.1 Existing Conditions

The efficiency of traffic operations at an intersection is measured in terms of Level of Service (LOS), which is a measure of average intersection operating conditions based on volume to capacity (V/C) ratios during a specified hour of the day or night. LOS measures range from A to F, with A representing the best (free-flowing) conditions and F representing extreme congestion and intersection gridlock. The lowest acceptable LOS in an urban or suburban area is generally considered to be LOS D, with a LOS at E or F an unacceptable operating condition warranting mitigation.

Project Environmental Background

The 2002 EIR projected annual Rancho visitors to increase by 16,400 persons for an estimated total of 32,800 persons per year. It was estimated that about 1,480 from this 16,400 visitor increase would be attributable to the Barns Complex for lectures/workshops and docent training/classes, as well as use of the research library for general meetings and foundation activities. About 3,530 additional visitors would result from increased attendance at weekend public events. The remaining approximately 11,400 visitor increase would result from normally anticipated growth that would occur even if the Master Plan were not implemented.

Implementation of the Master Plan was forecast in the 2002 EIR to increase trip generation by 94 trips from the 1999 levels of 184 daily trips (92 inbound and 92 outbound) to 278 daily trips (139 inbound and 139 outbound). Only 31 daily trips were determined to be a direct result of Rancho expansion/renovation under the Master Plan, with the remaining 63 trip increase considered to be normal growth that would occur without the Master Plan.

The two key intersections analyzed in the 2002 EIR were Long Beach Boulevard at San Antonio Drive and Virginia Road at San Antonio Drive. Peak hour intersection capacity analysis performed in that EIR determined there would be no significant impact to these intersections from Master Plan implementation. The Long Beach Boulevard/San Antonio Drive intersection would operate at an LOS of B for the AM peak and C for the PM peak, while the Virginia Road/San Antonio Drive intersection would continue at an LOS of A for both AM and PM peak periods.

In terms of on-site parking supply, the Rancho provided a total of 34 on-site parking spaces at the time of the 2002 EIR for use by employees, visitors, and tour attendees. During special events, Rancho staff and event volunteers park

their vehicles off-site with shuttle service provided from an off-site parking lot. Approximately 126 "over-flow" curb-side spaces are available on Virginia Road for special events parking.

At 34 on-site spaces, the Rancho was considered to be legal nonconforming for on-site parking required under the City's Zoning Code. The approved Master Plan reduced this on-site parking supply by 10 spaces for a total of 24 spaces in order to provide more open space at the Rancho and to better accommodate the Visitor Center.

The 2002 EIR included a parking analysis conducted by Linscott Law & Greenspan to determine the number of parking spaces needed to support day-to-day Rancho operations on a typical weekday and weekend day, and at the completion of the Master Plan. Functional parking demand was estimated by studying the Rancho operating schedule, work schedules, expected number of daily visitors, and the average number of people per vehicle.

Without Master Plan implementation, existing parking demand was 24 spaces for the weekday peak period and 22 spaces for the weekend peak period. Under the Master Plan build-out scenario, parking demand would increase to 37 spaces for the weekday peak period and 36 spaces for the weekend peak period. Since Master Plan implementation included reduction of the on-site parking supply from 34 to 24 spaces, the parking analysis concluded that future parking for peak periods could not be accommodated with this reduced on-site parking supply, and spill-over to public street parking (Virginia Road) would result from this build-out.

The 2002 EIR found this parking impact to be an unavoidable adverse impact that could not be mitigated to a less than significant level. Therefore, as part of the Master Plan approvals, the Long Beach Planning Commission adopted a Statement of Overriding Considerations finding that the project benefits outweighed the unavoidable adverse effect of this parking impact.

4.2.2 Project Impacts

Initial Study Findings

The proposed project modification would be considered to have a significant impact to transportation and traffic if the project would exceed any of the following threshold of significance:

a. The project would cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., results in a substantial increase in either the number of

vehicle trips, the volume to capacity ratio on roads, or congestion at intersections);

b. The project would exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways;

c. The project would result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;

d. The project would substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);

e. The project would result in inadequate emergency access;

f. The project would result in inadequate parking capacity;

g. The project would conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks).

The Initial Study (Appendix B) determined that the project modification proposal has the potential to result in inadequate parking capacity without mitigation incorporation. All other environmental thresholds listed above were determined at either a no impact or less than significant impact level for this modification.

Parking Impacts

As part of the Master Plan approval, the Rancho is required to provide a total of 24 on-site parking spaces. The 2002 EIR analyzed the impacts of this parking supply and a Statement of Overriding Considerations was adopted for this environmental impact. Therefore, no further analysis of the Master Plan on-site parking supply at 24 spaces is warranted.

The project modification would eliminate eight spaces from the approved Master Plan, reducing the on-site parking supply from 24 to 16 spaces. These eight spaces, originally planned for the northeastern portion of the Rancho site, represented the entire staff parking lot. As discussed in Section 3.3 of the EIR Addendum, the close location of this staff parking lot to abutting residences and the steep slope of the northwestern area to be used as an access road connecting this parking to the main interior roadway rendered this parking lot improvement infeasible.

The Rancho has entered into an agreement with the Virginia Country Club for shared use of the existing Country Club parking lot with Rancho staff parking needs. Rancho staff could utilize any of the 177 total designated and paved parking spaces adjacent to the Clubhouse, although the Rancho will encourage their staff to use the spaces along the eastern Rancho property line. An existing access gate is located on the Rancho's eastern wall by these spaces, connecting to a path leading across the Rancho garden to the main Ranch House. This is a

locked gate with entry limited to Rancho staff members to ensure security for both land uses.

The Virginia Country Club had a parking demand survey prepared last year by LMA Consulting Group to determine if there is sufficient existing parking for Country Club demands. Parking counts were performed for fifteen non-contiguous days from October 4 to 19, 2005 (four days were not used in the compilation of this demand data due to either rain or counts that were substantially below typical demand rates). Parking counts were conducted at 7:00 AM, 8:00 AM, 10:00 AM, 12 noon, 2:00 PM. 4:00 PM and 6:00 PM.

The results of this parking survey found that peak demand for the available 177 Virginia Country Club spaces average 114 spaces or 64% of total parking supply. Peak demand occurred between 12 noon to 2:00 PM and included the 25-30 spaces used by employees and vendors. Therefore, adequate excess capacity exists at the Virginia Country Club to accommodate the eight space parking demand for Rancho employees.

4.2.3 Mitigation Measures

Since the project modification would reduce the supply of on-site parking by eight spaces from the previously approved 24 spaces to 16 spaces, the following mitigation measure is recommended.

Mitigation Measure 4.2.1: On-Site Parking Spaces

> The applicant shall have continuous and unobstructed legal access to at least eight off-site parking spaces either at the Virginia Country Club or at any other property within 600 feet on the Rancho Los Cerritos property boundaries.
>
> Monitoring Phase: Prior to issuance of a certificate of occupancy
>
> Enforcement Agency: Department of Planning and Building
>
> Monitoring Agency: Department of Planning and Building

It is anticipated that any potential impacts related to parking space demands will be reduced to a less than significant level with mitigation incorporation.

SECTION 5.0
SIGNIFICANT UNAVOIDABLE IMPACTS

This Section identifies all potentially significant unavoidable adverse impacts associated with the modified project as required by CEQA Guidelines Section 15126.2(b).

Based on the environmental analysis provided in Sections 4.0 through 4.2 of this Addendum to the 2002 EIR, the project modification would result in no new significant unavoidable adverse impacts. All potentially significant impacts resulting from joint use of the existing Virginia Country Club parking facilities can be mitigated to a less than significant level. In addition, elimination of the impervious surfaces that made up the on-site staff parking lot and connecting roadway will improve drainage and increase the amount of landscaped areas at the Rancho. Since this proposed modification to the original approval would not create any new unavoidable adverse impacts, this modification would not exceed any significance levels identified in the 2002 EIR.

The 2002 EIR identified a reduction in the amount of on-site parking from 34 to 24 spaces as the only unavoidable significant adverse impact from the Master Plan. No unavoidable adverse impacts were identified in the 2002 EIR Aesthetics, Agricultural Resources, Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Noise, Population and Housing, Public Services, Recreation, and Utilities and Service Systems.

No new significant unavoidable adverse impacts were identified in this Addendum to the 2002 EIR and therefore no further CEQA review of unavoidable adverse impacts is necessary.

SECTION 6.0
SIGNIFICANT IRREVESIBLE CHANGES

This Section identifies the irretrievable commitments of nonrenewable resources through project implementation in accordance with CEQA Guidelines Section 15126.2(c). While implementation of Phase II improvements would involve consumption of the resources and materials, the project modification to eliminate a paved surface parking lot from the Phase II improvements would not involve any use or commitment of nonrenewable resources. Instead of constructing impervious surfaces for a parking lot, this portion of the project site would continue to remain in its natural, undisturbed state.

SECTION 7.0
GROWTH INDUCING AND CUMULATIVE IMPACTS

7.1 Growth-Inducing Impacts

The analysis of growth-inducing impacts is provided in accordance with CEQA Guidelines Section 15126.2(d), which requires a discussion of the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. A discussion is also required on project characteristics which could encourage or facilitate other activities that could significantly affect the environment, either individually or cumulative.

The 2002 EIR on page 93 used three growth-inducing criteria to evaluate potential growth inducing impacts from the Master Plan: Economic Growth, Precedent Setting Action, and Open Space. It was determined in this original EIR that implementation of the Master Plan would not generate increased revenue or employment, would not create any precedents for the Rancho since it would be the final Master Plan, and would not encroach upon open spaces. Therefore, the 2002 EIR concluded that the Master Plan would not be growth inducing.

The modification proposal to eliminate an on-site staff parking lot and allow joint use of the existing Virginia Country Club parking facilities would not be considered growth inducing since it would not create any new economic or population growth impacts and therefore no further CEQA analysis of potential growth-inducing impacts under this EIR Addendum is necessary.

7.2 Cumulative Impacts

CEQA Guidelines Section 15130 requires a discussion of a proposed project's cumulative impacts where the project's incremental effect is cumulatively considerable. CEQA Guidelines Section 15065(a)(3) defines "cumulatively considerable" as incremental project effects that are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. The project modification to eliminate an on-site parking lot would not result in any cumulative effects since no incremental effects would result from this project.

SECTION 8.0
PROJECT ALTERNATIVES

Section 15126.6 of the CEQA Guidelines requires that an EIR describe a range of reasonable alternatives to the proposed project, or to the location of the project, and evaluate the comparative merits of such alternatives. The intent of this requirement is to consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR need not consider infeasible project alternatives. The range of potential project alternatives is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice and examine in detail only those alternatives that could feasibly accomplish most of the basic project objectives and could avoid or substantially lessen one or more of the significant effects of the project. The EIR should also identify any alternatives considered for analysis but rejected as infeasible and discuss the reasons underlying that determination.

The range of alternatives must pass a feasibility test pursuant to CEQA Guidelines Section 15126.6(f)(1), which states that among the factors to be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictions boundaries, and whether the project proponent can reasonably acquire, control or otherwise have access to an alternative project site location.

A "No-Project" Alternative shall be one of the alternatives evaluated under this requirement but is not to be the baseline for determining whether the proposed project's potential environmental impacts may be significant. If the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.

The factors used to determine feasible project alternatives involve the basic objectives established for this project, the identification of potential significant impacts from the project, and possible land uses for the project site.

The original 2002 EIR considered the following alternatives:

Alternative 1: No Project
Alternative 2: Increased On-Site Parking
Alternative 3: Partial Project

All three alternatives were thoroughly analyzed in Section 7 of the 2002 EIR, which stated on page 91 that the No Project alternative is usually considered to be the environmentally superior choice since no action is taken and consequently there are no environmental changes. However, in this case, with no Master Plan

changes, significant adverse cultural impacts will be higher because there will be no reconstruction of the Barn, no construction of the Visitors Center, and no construction of the Caretaker's Residence, thus impacting the space available in the adobe Ranch House. Therefore, the Master Plan project as proposed was considered to be the environmentally superior project.

The project modification would reduce the amount of on-site parking for the Rancho, but since this parking area was intended only for staff parking, this modification would not alter public access to the Rancho. Since the modification would not alter the cultural advantages of the Master Plan as determined to be the environmentally superior project in the 2002 Master EIR, no further Alternatives analysis for this EIR Addendum is necessary.

SECTION 9.0
CONTACTS, PREPARERS AND REFERENCES

City of Long Beach

Angela Reynolds, Planning Officer
Craig Chalfant, EIR Project Planner
Lynette Ferenczy, Project Planner
Ellen Calomiris, Historic Sites Officer

REFERENCES

Rancho Los Cerritos Master Plan Project Environmental Impact Report, State Clearinghouse No. 99148658, certified by the Planning Commission on April 18, 2002

APPENDIX A

MITIGATION MONITORING PROGRAM

MITIGATION MONITORING PROGRAM

Mitigation Measure 4.1.1: Standards Variance and Administrative Use Permit Approvals

The applicant shall obtain City approval of the requested Standards Variance and Administrative Use Permit to eliminate the previously required on-site staff parking lot and allow use of the existing Virginia Country Club parking lot OR revise the project design features to provide a minimum eight space on-site staff parking lot.

Monitoring Phase: Prior to issuance of any project building permits

Enforcement Agency: Department of Planning and Building

Monitoring Agency: Department of Planning and Building

It is anticipated that any potential impacts related to land use will be reduced to a less than significant level with mitigation incorporation.

Mitigation Measure 4.2.1: On-Site Parking Spaces

The applicant shall have continuous and unobstructed legal access to at least eight off-site parking spaces either at the Virginia Country Club or at any other property within 600 feet on the Rancho Los Cerritos property boundaries.

Monitoring Phase: Prior to issuance of a certificate of occupancy

Enforcement Agency: Department of Planning and Building

Monitoring Agency: Department of Planning and Building

APPENDIX B

INITIAL STUDY

Rancho Los Cerritos Master Plan Modification

INITIAL STUDY

Prepared by:

City of Long Beach
Community and Environmental Planning
333 West Ocean Boulevard, Fifth Floor
Long Beach, California 90802

INITIAL STUDY

1. **Project title:**

   Rancho Los Cerritos Master Plan Modification

2. **Lead agency name and address:**

   Planning Commission
   333 West Ocean Boulevard

3. **Contact person and phone number:**

   Angela Reynolds
   Environmental Planning Officer

4. **Project location:**

   4600 N. Virginia Road, Long Beach, CA 90807

5. **Project sponsor's name and address:**

   Ellen Calomiris, Historic Sites Officer
   Department of Parks, Recreation and Marine
   4600 N. Virginia Road
   Long Beach, CA 90807

6. **General Plan:**

   LUD #11, Open Space/Parks

7. **Zoning:**

   P, Parks

8. Description of project:

Modify Master Plan approved in 2002 by eliminating eight on-site staff parking spaces and providing the eight staff parking spaces in the adjacent Virginia Country Club parking area. Remaining project components for Phase II of Master Plan remain unchanged: new construction of 2,900 square foot Visitor Center and 850 square foot Caretaker Residence, entryway and landscaping improvements, and demolition of City-added restrooms and parking lot per the Rancho Los Cerritos approved Master Plan.

9. Surrounding land uses and setting:

North: Single family residential properties (R-1-L zoning district)

West: Single family residential properties (R-1-L zoning district)

South: Virginia Country Club (I, Institutional zoning district)

East: Virginia Country Club (I, Institutional zoning district)

10. Other public agencies whose approval is required:

Cultural Heritage Commission: Certificate of Appropriateness

Planning Commission: Site Plan Review, Standards Variance, Administrative Use Permit

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

Aesthetics	Agriculture Resources	Air Quality
Biological Resources	Cultural Resources	Geology/Soils
Hazards & Hazardous Materials	Hydrology/Water Quality	◆ Land Use/Planning
Mineral Resources	National Pollution Discharge Elimination System	Noise
Population/Housing	Public Services	Recreation
◆ Transportation	Utilities/Service Systems	Mandatory Findings of Significance

DETERMINATION:

On the basis of this initial evaluation:

— I find that the proposed project **COULD NOT** have a significant effect on the Environment and a **NEGATIVE DECLARATION** will be prepared.

✓ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. **A MITIGATED NEGATIVE DECLARATION** will be prepared.

— I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

— I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.

— I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

EVALUATION OF ENVIRONMENT IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parenthesis following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. A Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less than Significant with "Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration Section 1 5063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.

   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the score of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated", describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

[Insert Vicinity Map]

[Insert Project Map]

ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS – Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☑
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☑	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☑
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☑
II. AGRICULTURE RESOURCES – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☑
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☑
c) Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use?	☐	☐	☐	☑
III. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☑

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	☑
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	☑
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☑	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☑

IV. BIOLOGICAL RESOURCES – Would the project:

a) Have a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U. S. Fish and Wildlife Service?	☐	☐	☐	☑
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U. S. Fish and Wildlife Service?	☐	☐	☐	☑
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☑
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☑
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☑

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☑
V. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section §15064.5?	☐	☐	☑	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section §15064.5?	☐	☐	☑	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☑
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☑
VI. GEOLOGY AND SOILS – Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☑	☐
ii) Strong seismic ground shaking?	☐	☐	☑	☐
iii) Seismic-related ground failure, including Liquefaction?	☐	☐	☑	☐
iv) Landslides?	☐	☐	☐	☑
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☑
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☑

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☑
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☑
VII. HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☑
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☑
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☑
d) Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☑
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☑
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☑
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☑
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☑

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
VIII. HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☐	☑
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☑
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☑	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☑	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☑	☐
f) Otherwise degrade water quality?	☐	☐	☐	☑
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☑
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☑
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☑
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☑

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
IX. LAND USE AND PLANNING – Would the project:				
a) Physically divide an established community?	☐	☐	☑	☐
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☑	☐	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☑
X. MINERAL RESOURCES – Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☑
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☑
XI. NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM – Would the project:				
a) Result in a significant loss of pervious surface?	☐	☐	☑	☐
b) Create a significant discharge of pollutants into the storm drain or water way?	☐	☐	☑	☐
c) Violate any best management practices of the National Pollution Discharge Elimination System permit?	☐	☐	☐	☑
XII. NOISE – Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☑	☐
b) Exposure of persons to or generation of excessive groundborne vibration or ground-borne noise levels?	☐	☐	☑	☐

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☑
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☑	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☑
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☑
XIII. POPULATION AND HOUSING – Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☑
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑
XIV. PUBLIC SERVICES – Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?	☐	☐	☑	☐
b) Police protection?	☐	☐	☑	☐
c) Schools?	☐	☐	☐	☑
d) Parks?	☐	☐	☐	☑
e) Other public facilities?	☐	☐	☐	☑

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XV. RECREATION –				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☑	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☑
XVI. TRANSPORTATION/TRAFFIC – Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☑	☐
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☐	☑
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☑
d) Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☑
e) Result in inadequate emergency access?	☐	☐	☐	☑
f) Result in inadequate parking capacity?	☐	☑	☐	☐
g) Conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	☑
XVII. UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☑

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☑
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☑
d) Have sufficient water supplies available to serve the project from existing entitlement and resources, or are new or expanded entitlement needed?	☐	☐	☐	☑
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☑
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	☑
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☑
XVIII. MANDATORY FINDINGS OF SIGNIFICANCE –				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☑
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☑	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☑	☐

$25.00 Filing Fee

NOTICE OF DETERMINATION

TO: Office of Planning/Research
1400 Tenth St., Room 121
Sacramento, CA 95814

X Office of the County Clerk
Environmental Filings
12400 E. Imperial Hwy., #1101
Norwalk, Ca 90650

From: Dept. of Planning & Building
333 W. Ocean Blvd., 4th Floor
Long Beach, Ca 90802

FILED
DEC 20 2002
CONNY B. McCORMACK, COUNTY CLERK
DEPUTY

Subject:

Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

Rancho Los Cerritos Master Plan
Project Title

SCH 99148658 *Gerhardt H. Felgemaker* *(562) 570-6894*
State Clearinghouse Number (If submitted to Clearinghouse) **Lead Agency Contact Person** **Area Code/Telephone**

4600 Virginia Road, Long Beach, California *Los Angeles County*
Project Location (include county)

Project Description:

Adoption of a Master Plan for the future development of the Rancho Los Cerritos Historic site. The Project will involve the adoption and implementation of a Master Plan, which plan is to be divided into three major construction phases over a 25-year period. Restoration and reconstruction of Rancho Los Cerritos, a building on the National Register. Construction of New Visitors Center and Caretaker's Unit (in the Adobe style) and Reconstruction of Barn.

This is to advise that the City Council has approved the above-described project on *November 26 2002* and has made the following determinations regarding the above described project:

1. The project [____ will __X__ will not] have a significant effect on the environment.
2. __X__ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   Certified: *April 18, 2002*

   ____ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
   Certified:
3. Mitigation Measures [__X__ were ____ were not] made a condition of the approval of the project.
4. A statement of Overriding Considerations [_____ was __X__ was not] adopted for this project.
5. Findings [__X__ were _____ were not] made pursuant to the provisions of CEQA.

This is to certify that the Environmental Impact Report with comments and responses and record of project approval is available for review to the General Public at:

Department of Planning and Building, 333 W. Ocean Blvd., 4th Floor, Long Beach, CA 90802

THIS NOTICE WAS POSTED
ON DEC 20 2002
UNTIL DEC 20 2003
REGISTRAR-RECORDER/COUNTY CLERK

November 27, 2002

Secretary **Date**

$25.00 Filing Fee

FILED

APR 23 2002

CONNY B. McCORMACK, COUNTY CLERK
Virby Gordon
DEPUTY

RECEIVED
JUN 02 2002
Planning and Building Dept.
Community Planning

NOTICE OF DETERMINATION

TO: Office of Planning/Research
1400 Tenth St., Room 121
Sacramento, CA 95814

X Office of the County Clerk
Environmental Filings
12400 E. Imperial Hwy., #1101
Norwalk, Ca 90650

From: Dept. of Planning & Building
333 W. Ocean Blvd., 4th Floor
Long Beach, Ca 90802

RECEIVED
JUN 04 2002
Planning and Building Dept.
Community Planning

THIS NOTICE WAS POSTED
ON APR 23 2002
UNTIL MAY 23 2002
REGISTRAR-RECORDER/COUNTY CLERK

Subject: Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

Rancho Los Cerritos Master Plan
Project Title

SCH 99148658 | *Gerhardt H. Felgemaker* | *(562) 570-6894*
State Clearinghouse Number (If submitted to Clearinghouse) | **Lead Agency Contact Person** | **Area Code/Telephone**

4600 Virginia Road, Long Beach, California | *Los Angeles County*
Project Location (include county)

Project Description:

Adoption of a Master Plan for the future development of the Rancho Los Cerritos Historic site. The Project will involve the adoption and implementation of a Master Plan, which plan is to be divided into three major construction phases over a 25-year period. Restoration and reconstruction of Rancho Los Cerritos, a building on the National Register. Construction of New Visitors Center and Caretaker's Unit (in the Adobe style) and Reconstruction of Barn.

This is to advise that the Long Beach Planning Commission has approved the above-described project on *April 18, 2002* and has made the following determinations regarding the above described project:

1. The project [____ will __X__ will not] have a significant effect on the environment.
2. __X__ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   Certified: *April 18, 2002*

   ____ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
   Certified:
3. Mitigation Measures [__X__ were ____ were not] made a condition of the approval of the project.
4. A statement of Overriding Considerations [_____ was __X__ was not] adopted for this project.
5. Findings [__X__ were _____ were not] made pursuant to the provisions of CEQA.

This is to certify that the Environmental Impact Report with comments and responses and record of project approval is available for review to the General Public at:
Department of Planning and Building, 333 W. Ocean Blvd., 4th Floor, Long Beach, CA 90802

April 19, 2002
Secretary **Date**

02 0000786

CERTIFICATE OF FEE EXEMPTION

De Minimis Impact Finding

To: Office of Planning & Research
1400 Tenth Street, Room 121
Sacramento, CA 95814

From: Department of Planning & Building
Community & Environmental Planning
333 W. Ocean Boulevard, 4th Floor
Long Beach, CA 90802

FILED

APR 23 2002

CONNY B. McCORMACK, COUNTY CLERK
R. JORDAN DEPUTY

✓ Office of the County Clerk
Environmental Filings
12400 E. Imperial Hwy., #1101
Norwalk, CA 90650

✓ Applicant

Rancho Los Cerritos Master Plan/4600 Virginia Road
Project Title/Location

SCH 99148658 *Los Angeles*
Project Number **County**

Project Description:

Adoption of a Master Plan for the future development of the Rancho Los Cerritos Historic site. The Project will involve the adoption and implementation of a Master Plan, which plan is to be divided into three major construction phases over a 25-year period. Restoration and reconstruction of Rancho Los Cerritos, a building on the National Register. Construction of New Visitors Center and Caretaker's Unit (in the Adobe style) and reconstruction of Barn.

__X__ An Environmental Impact Report has been prepared and certified for the project. Certified: April 18, 2002

____ Negative Declaration has been prepared and certified for the Project. Certified:

__X__ It is found and declared as a result of the Initial Study and Environmental report that there is no evidence before the Planning Commission that the project will have any potential for adverse effect individually or cumulatively on wildlife resources, and that the project is therefore exempt from the California Department of Fish and Game fee.

Wildlife shall be defined, for the purpose of this process as "all wild animals, birds, plants, fish, amphibians, and related ecological communities, including the habitat upon which the wildlife depends for its continued viability." (Section 711.2, Fish and Game Code.)

Certification:

I hereby certify that the public agency has made the above finding and that the project will not individually or cumulatively have an adverse effect on wildlife resources, as defined in Section 711.2 of the Fish and Game Code.

April 19, 2002
Secretary **Date**

Lead Agency: Planning Commission

THIS NOTICE WAS POSTED
ON APR 23 2002
UNTIL MAY 23 2002
REGISTRAR-RECORDER/COUNTY CLERK

02 0000786

FILED

APR 23 2002

CONNY B. McCORMACK, COUNTY CLERK

DEPUTY

RESOLUTION NO. R-

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF LONG BEACH CERTIFYING THAT THE FINAL ENVIRONMENTAL IMPACT REPORT FOR THE RANCHO LOS CERRITOS MASTER PLAN (SCH 99148658) HAS BEEN COMPLETED IN ACCORDANCE WITH THE PROVISIONS OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT AND STATE AND LOCAL GUIDELINES; AND MAKING CERTAIN FINDINGS AND DETERMINATIONS RELATIVE THERETO

Robert E. Sha... a
City Attorney of Long Beach
333 West Ocean Boulevard
Long Beach, California 90802-4664
Telephone (562) 570-2200

The Planning Commission of the City of Long Beach does hereby find, determine and resolve:

Section 1. The Rancho Los Cerritos Foundation ("Applicant") has submitted an application for the adoption of a Master Plan for the future development of the Rancho Los Cerritos historic site ("The Project") at 4600 Virginia Road ("Project site") in the City of Long Beach, California ("City"). The Project site consists of a 4.74 acre parcel on which exists Rancho Los Cerritos, a national, state, and local historic landmark owned and operated by the City of Long Beach since 1955 as a public museum and historic site.

The Project site is situated in the Bixby Knolls area of Long Beach near the intersections of San Antonio Avenue and Long Beach Boulevard. The site is east of the Long Beach ("710") Freeway and South of Del Amo Boulevard. The location of the Project site is depicted in Volume 1, page 3, of the Draft Environmental Impact Report ("DEIR"). The entrance to the site is not adjacent to any homes and is located north of the Virginia Country Club. The nearest residential homes are located past the entrance to the site, on the northern perimeter of the Rancho. Access to the homes is on a

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privately owned street that is gated.

The Project will involve the adoption and implementation of a Master Plan , which plan is to be divided into three major construction phases over a 25-year period. These are divided as follows: Phase 1 (2002-2004); Phase 2 (2005-2014); and Phase 3 (2015-2024). Funding availability will help determine the precise timing of each phase of the project. In connection with the implementation of the Master Plan the following physical changes are proposed for the Site: (Phase 1) The installation of an eight foot high black vinyl perimeter chain link fence to be hidden by landscaping, the planting of new landscaping along the chain link perimeter fencing, the installation of a new fire hydrant on site and the installation of a new fire alarm system within the historic adobe, the installation of an adequate security system for the interior of the Ranch House, the installation of off-site directional signage to the Rancho, and the restoration of the Rancho's inner courtyard. (Phase 2) Construction of a new entrance gate, fencing, mailbox, community refuse shelter and paving of the Virginia Road entry to the site, construction of a new visitor center and attached restroom facilities, the reconfiguration of parking for the visitor's area, the relocation of a refuse shelter to the southeast section of the visitor's parking area, the construction of a caretaker's residence, the construction of a new driveway and gate control for the site, the installation of new interpretive signage along the entrance roadway adjacent to the arroyo, the installation of a perimeter security system, the provision of a temporary parking area for staff at the rear of the maintenance yard, improvements to accessibility to the site including ADA compliance to certain portions of the Rancho, the planting of an orchard garden, improvements to the landscaping of the arroyo area, the landscaping of that area outside the brick courtyard walls on the Virginia Country Club side of the project, the rehabilitation of the present visitor center for classroom use, the restoration of the east and south wings and restoration of the kitchen for a new interpretive program, and the installation of a new ADA lift at the classroom area for access to the verandas and Ranch House. (Phase 3) Provide historic American Building Survey drawings for the

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02 0000786

"Cornell's Hedge" and lawn area to the north of the servant's quarters, the demolition of "Cornell's Hedge" and lawn area , the demolition of the existing herb garden, the construction of a new barn complex consisting of staff offices, library, archives, collection, meeting area and restrooms, the demolition of the 1980's restroom facilities, the construction of new restroom facilities adjacent to the 1930's gardener's house, the reconstruction of "Cornell's garden" design to the south of the present lawn area, the reconstruction of a new barnyard for special events including fencing, ramada, horno, and other associated features, the construction of new staff parking near the maintenance yard, and the construction of a new workshop/gardener's storage structure. The precise description of the various master plan phases is contained at pages 27-28, inclusive, of the DEIR.

The Project goals and objectives are to adopt and begin implementation of the Rancho Los Cerritos Master Plan. The Master Plan is a document that proposes developmental and physical changes to the project site for the next twenty five (25) years. The stated goals of the Master Plan are to: 1) conserve those areas and characteristics of the Rancho site that remain intact from the historic time periods; and 2) restore and maintain the remainder of the Rancho site to reflect the general image and character of those time periods. The primary objectives of the Master Plan are to: 1) conduct, encourage, produce and share scholarly research on the history of Rancho Los Cerritos; 2) collect, preserve and manage appropriate artifacts; 3) develop innovative and effective interpretive programs on Rancho Los Cerritos history; 4) supplement the teaching of local and Southern California history in the classroom; 5) encourage local history instruction in the schools and colleges; and 6) expand resources and increase accessibility of the archives, research files and research library.

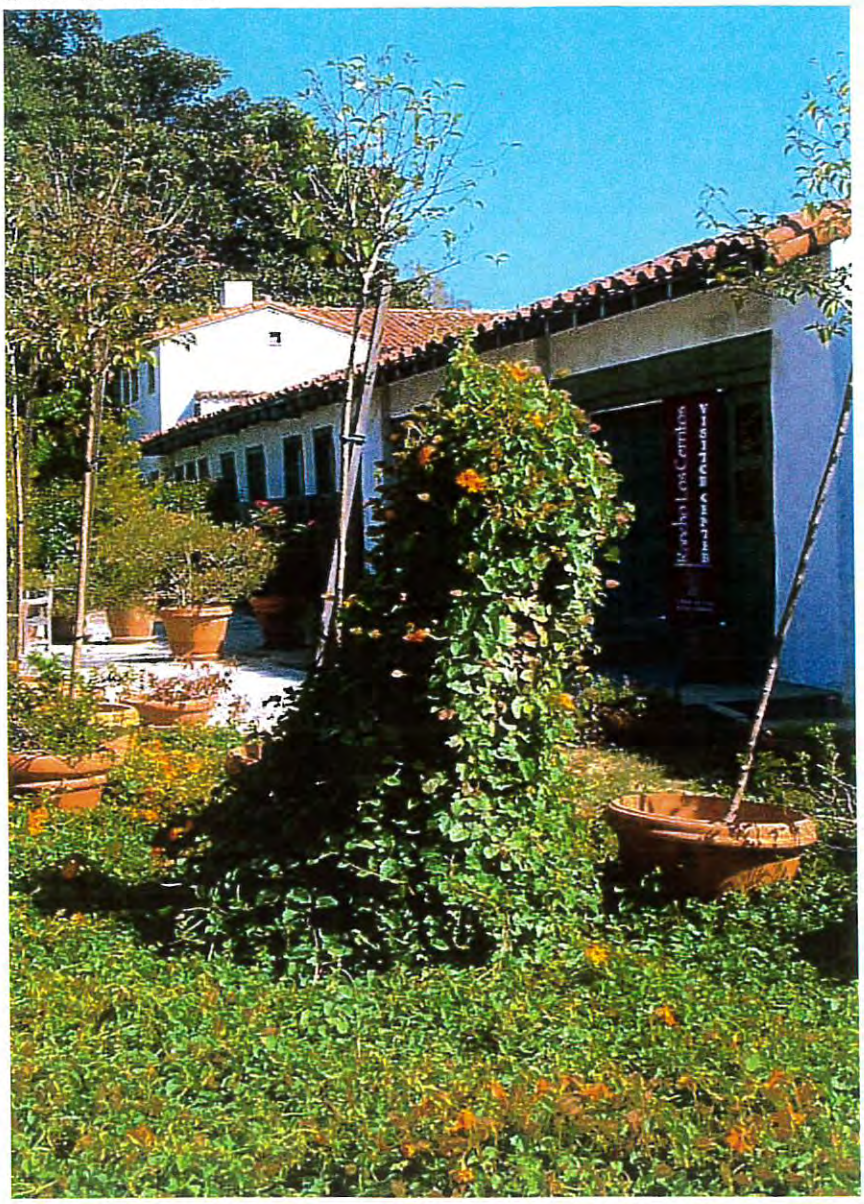
The Project site is designated in the City General Plan as Land Use District 11, "Open Space and Parks". This land use district is established in order to serve the overall purpose of promoting mental and physical health of the urban citizenry and such areas should be distributed so that all citizens, regardless of race, age, handicapped

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02 0000786

VOLUME 1
ENVIRONMENTAL IMPACT REPORT

SCH 99148658



RANCHO LOS CERRITOS MASTER PLAN PROJECT

Prepared by:

Community and Environmental Planning Division
Department of Planning and Building
January 2002

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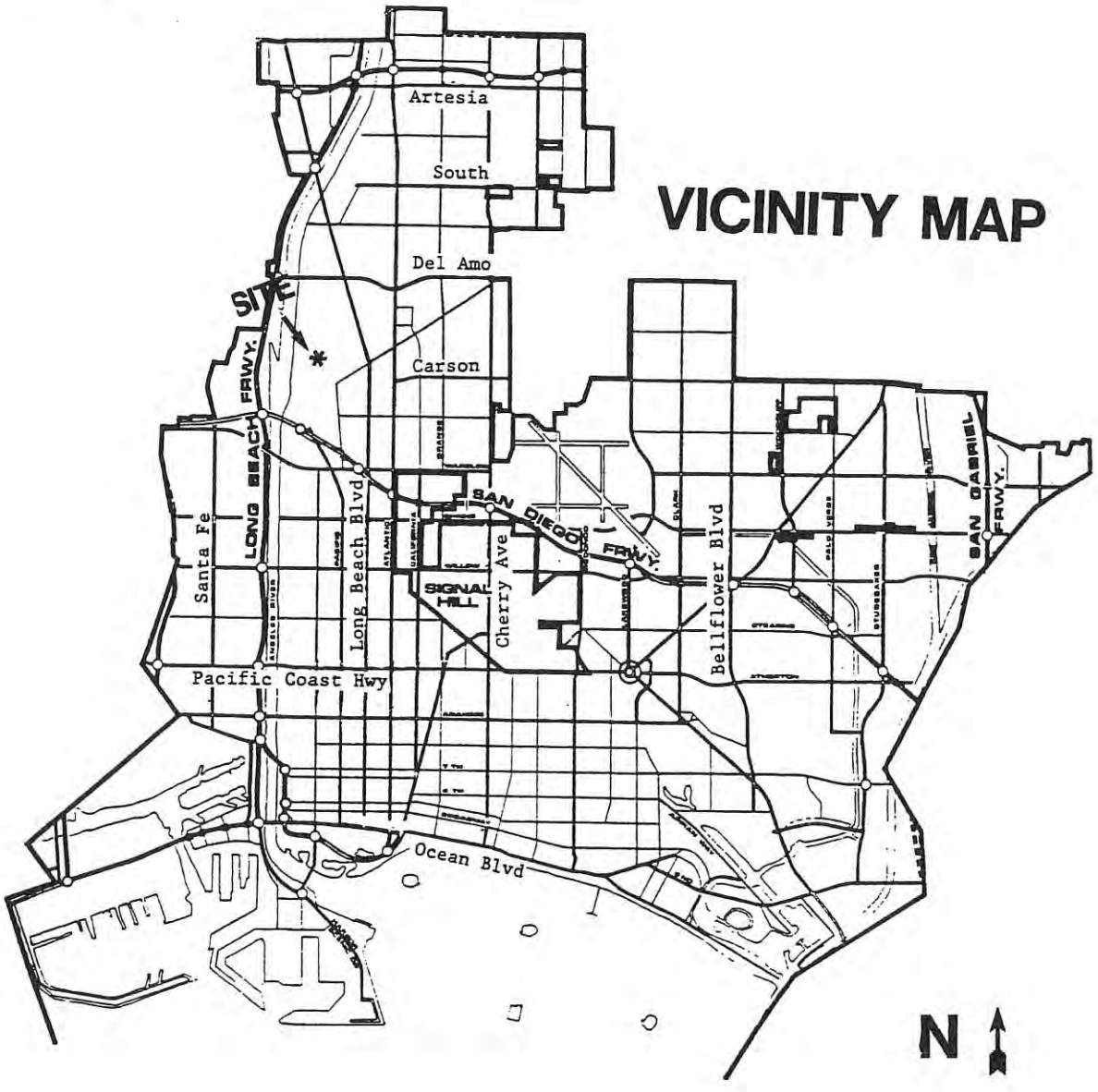
VOLUME TWO

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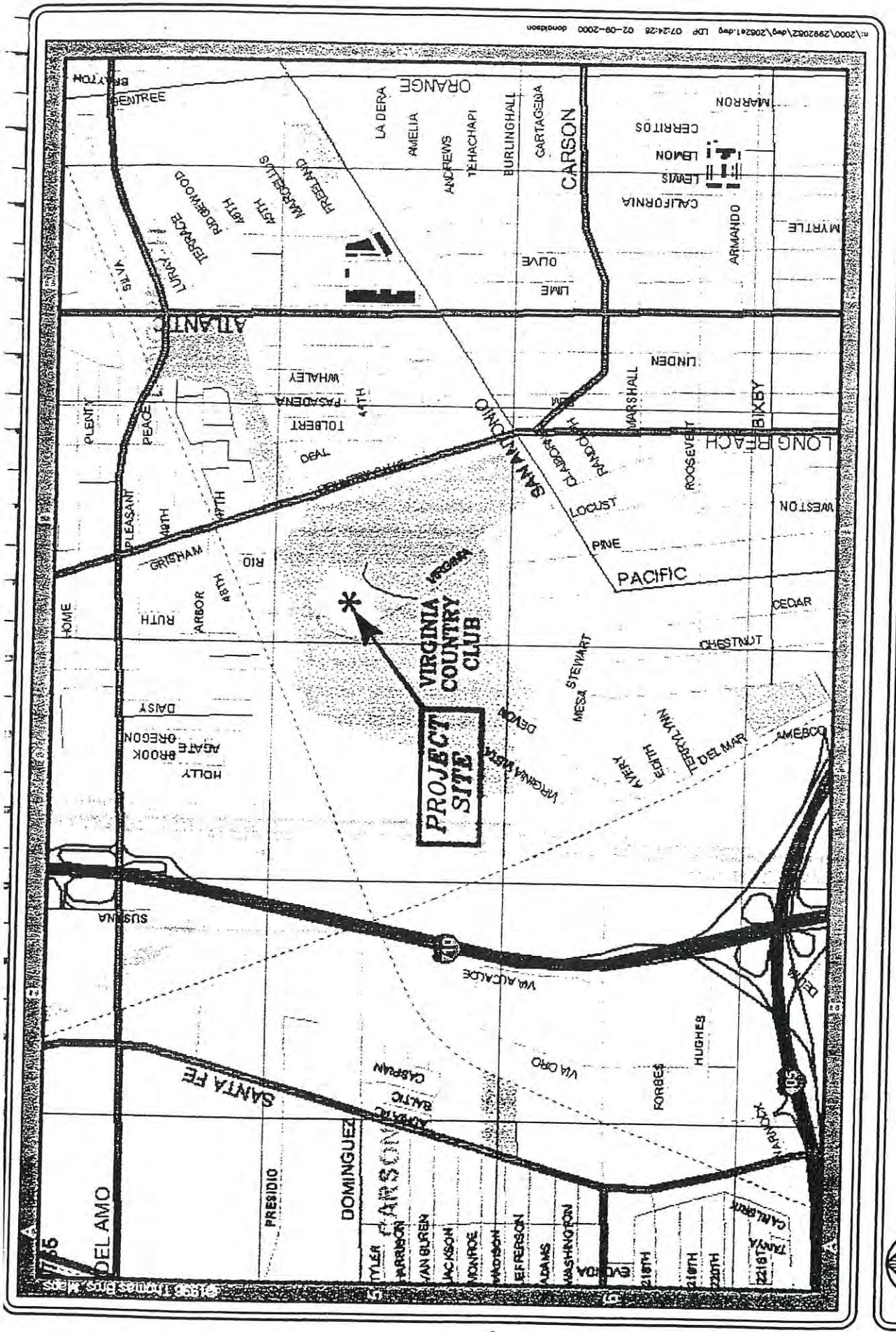
A	Rancho Los Cerritos Master Plan
B	Lead Paint Abatement Plan
C	Linscott, Law and Greenspan Engineers Traffic Impact Analysis and Parking Demand Study Rancho Los Cerritos Master Plan
D	Initial Study
E.	Archaeological Investigation of Los Cerritos Adobe..1987
F.	Cultural Resources Research in Support of the Rancho Los Cerritos Seismic Upgrade

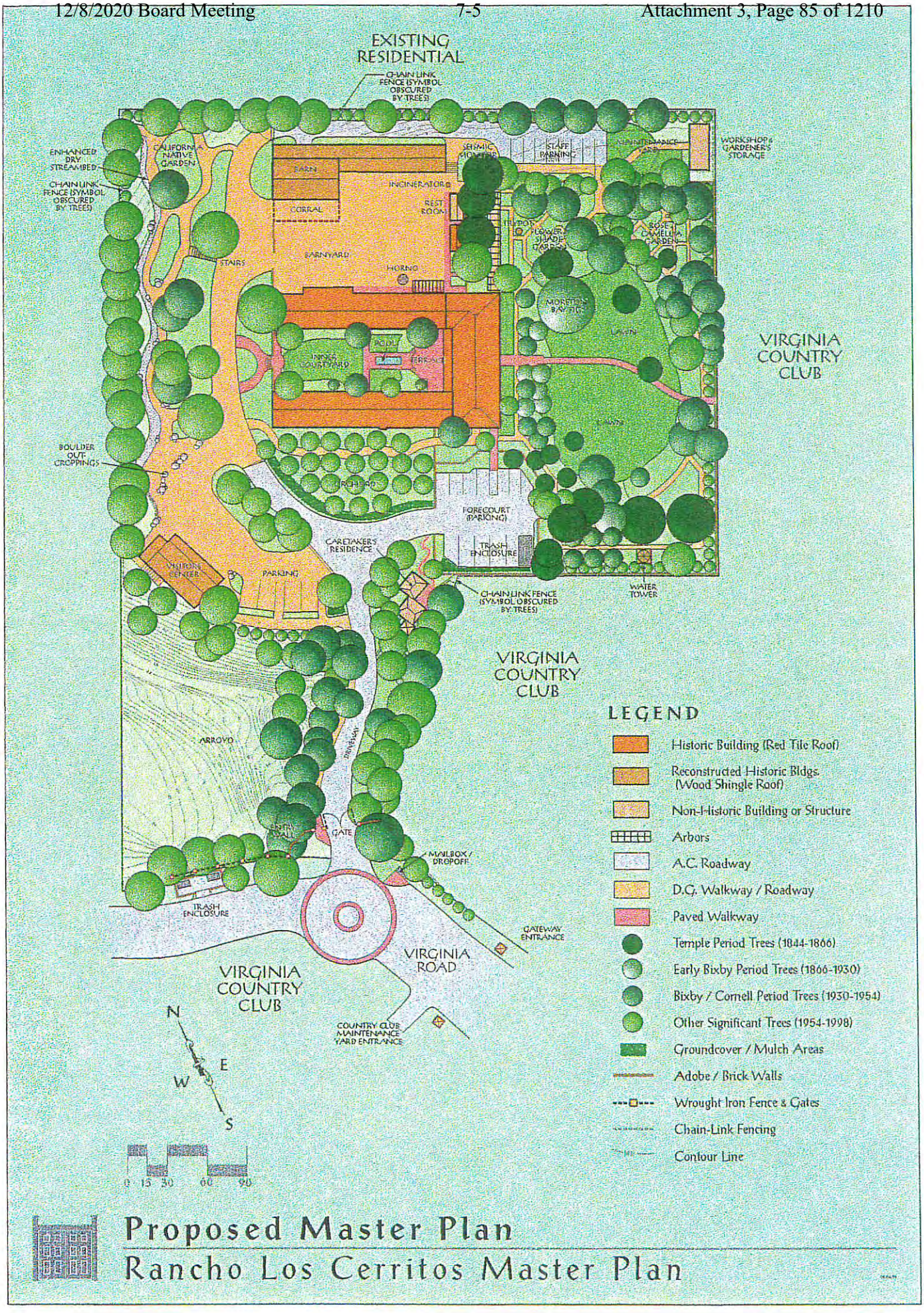


REGIONAL MAP



VICINITY MAP


PROJECT SITE
VIRGINIA COUNTRY CLUB
PACIFIC
LONG BEACH
CARSON
ORANGE
ATLANTIC
SAN ANTONIO
DEL AMO
SANTA FE
DOMINGUEZ
PRESIDIO
HARRISON
TYLER
VAN BUREN
JACKSON
MONROE
MADISON
JEFFERSON
ADAMS
WASHINGTON
CARLSON
HARBOR
VIA ORO
VIA ALCALDE
HUGHES
FORBES
DEL AMO
BENTREE
LA DERA
AMELIA
ANDREWS
TEHACHAPI
BURLINGHALL
CARTAGENA
CERRITOS
LEMON
LEWIS
CALIFORNIA
ARMANDO
MYRTLE
LIME
OLIVE
LINDEN
MARSHALL
ROOSEVELT
BIXBY
PASADENA
WHALEY
TOLBERT
PEACE
PLENTY
PLEASANT
GRISHAM
RIO
ARBOR
RUTH
HOME
DAISY
HOLLY
AGATE
BROOK
OREGON
SUSANA
LOCUST
PINE
CEDAR
CHESTNUT
WESTON
STEWART
MESA
DEVON
VIRGINIA
AVERY
TERRY LYNN
DEL MAR
AMECO
DELTA
CARLSBAD
TAMWORTH
219TH
218TH
220TH
221ST
ARAPAHOE
ALONDRA
ROSECRANS
ALONDRA
ARTESIA
ALONDRA
ALONDRA
ALONDR



Proposed Master Plan

Rancho Los Cerritos Master Plan

SECTION 1

EXECUTIVE SUMMARY

The following section contains a brief summary of the contents of the complete Environmental Impact Report. The summary serves as a tool for indexing and for the review of the subject matter and issues discussed in synopsis form. It should be noted that t review of the executive summary cannot replace a thorough and detailed examination of the document.

Project Components

The principal objective of the proposal is to begin implementation of the Rancho Los Cerritos Master Plan. The Master Plan is a document that proposes developmental and physical changes at the Rancho for the next 25 years. The stated goals of the Master Plan are to:

1. Conserve those areas and characteristics of the Rancho site that remain intact from the historic time periods; and
2. Restore and maintain the remainder of the site to reflect the general image and character of those time periods.

The primary objectives of the Master Plan are:

1. Conduct, encourage, produce and share scholarly research on the history of Rancho Los Cerritos;
2. Collect, preserve and manage appropriate authentic artifacts;
3. Develop innovative and effective interpretive programs on Rancho Los Cerritos history;
4. Supplement the teaching of local and Souther Califorina history in the classroom;
5. Encourage local history instruction in the schools and colleges; and
6. Expand resources and increase accessibility of the archives, research files and research library.

In order to accomplish Master Plan goals, the Master Plan calls for many physical changes to the existing Rancho. Following is a list of the key physical changes to the Rancho:

1. Restoration of the historic adobe to the 1930s era;
2. Restoration of most of the grounds areas to reflect Cornell's plans;
3. Seismic retrofit of the historic adobe to meet current codes Compliance with ADA;
4. Uprades to the security and safety of the site and structures;
5. Redesign and new landscaping of the entryway at Virginia Road, including signage improvements.

6. Construction of a Visitor Center, based on the pre-1834 Cota Adobe, providing visitor orientation and a museum gift shop, a docent changing area, a volunteer office, and public restrooms.
7. Reconfiguration of the main parking lot, to accommodate the new Visitor Center, removing all existing parking spaces, except, for the addition of four (4) additional handicapped parking spaces.
8. Construction of a new Caretaker's residence near the Virginia Road entrance.
9. Develop a parking new parking area for staff in the maintenance yard.
10. Reconstruction of the nineteenth century barns complex and barnyard.
11. Removal of the activity area from the southeast corner of the back garden.
12. Removal of the picnic area from the northwest corner of the property, and re-landscaping to reflect a native California landscape.
13. Construction of a rustic structure to house gardening tools and an exhibit workshop to replace the current trailer.
    Removal of the 1980s public restroom structure.
14. Installation of perimeter landscaping to provide a dense barrier between the site and neighboring properties.

The current Visitor Center is located in the Ranch House garage area and will be moved to the newly constructed Visitor Center. Also, the new Barns will house staff offices, archives and collections, additional restrooms, a small kitchen and a public assembly area. These activities are currently provided for in the Ranch House.

Project Location

Rancho Los Cerritos is located at 4600 Virginia Road, Long Beach. The major intersections are San Antonio and Long Beach Boulevard. The site is east of the 710 Freeway and south of Del Amo Boulevard.

The entrance of the Rancho is not adjacent to any homes and is located north of the entrance of the Virginia Country Club. The nearest residential homes are located past the entrance of the Rancho, on the northern perimeter of the Rancho. Access to these homes is on a privately owned street that is gated.

Environmental Analysis

The Environmental Impact Report (EIR) identifies and analyzes a number of potential environmental impacts that may be generated by the development, construction, or operation of the proposed project. These potential impacts are summarized below:

I. AESTHETICS

Rancho Los Cerritos is a unique historical site within the City of Long Beach. It is on the National Register and provides a physical link to California's past. Any development or renovation to the Rancho could, if improperly performed, have a significant impact to the historical value of the site.

The major physical changes proposed by the Rancho Los Cerritos Master Plan are the reconstruction of the original Barn, the construction of a Visitor Center, and the construction of the caretaker's residence.

The proposed setbacks and height for all new structures conform with the Title 21 of the Long Beach Municipal Code. The addition of these structures is not anticipated to affect views from the surrounding residential homes.

In addition, a dense vegetation buffer shall be installed along the entire perimeter of the site and along both sides of the driveway.

Significant Adverse Impacts, as defined by the California Environmental Quality Act will not occur.

II. AGRICULTURAL RESOURCES

Rancho Los Cerritos consists of 4.74 acres of land and is bordered by the Virginia Country Club on two sides, and single family residential on the other two sides. The City of Long Beach has developed around the Rancho and is highly urbanized.

Development of the proposed project will not result in any significant impact to agricultural resources as defined in the California Agricultural Land Evaluation and Site Model (1997) prepared by the California Department of Conservation. The proposed project is not located on farmland or within an agricultural zone.

Significant Adverse Impacts, as defined by the California Environmental Quality Act will not occur.

III. AIR QUALITY

The air quality in the project area is generally good and influenced by the marine wind pattern.

The California Environmental Quality Act (CEQA) requires that project impacts be evaluated for both short-term construction impacts and for project operational impacts.

Based on the CEQA Air Quality Handbook, operational air quality impacts will not be significant.

The project will cause a short-term air quality impact due to construction, if the project were built in one phase. Impacts would occur primarily as a result of fugitive dust and diesel emissions generated by heavy-duty construction vehicles during excavation, grading and construction activities.

A series of mitigation measures are proposed to protect the residential neighborhood from construction activities.

Significant Adverse Impacts, as defined by the California Environmental Quality Act will not occur.

IV. BIOLOGICAL

The Adobe Ranch House and surrounding land of Rancho Los Cerritos was established in 1844 and once encompassed 27,000 acres. As cities began to develop, the area of rangeland of the Rancho continued to decrease along with native plant and animal life. Today the Rancho consists of 4.72 acres with no animal of plant life identified as endangered or threatened by the California Department of Fish and Game on the site. However, many birds are observed to nest and feed at the Rancho.

There are many trees at Rancho Los Cerritos that may be considered to be of historical significance. Among these trees are those planted during the Temple Family period (1844-1866), the early Bixby Family period (1866-1930) and the Bixby / Cornell Family period (1930-1954).

A mitigation measure is proposed to protect bird nesting activities during construction.

Significant Adverse Impacts, as defined by the California Environmental Quality Act will not occur.

V. CULTURAL RESOURCES

Rancho Los Cerritos provides an interesting and rare link to California's past. There are very few remaining sites within California that provide a glimpse into

life in California during the Rancho period of the state. Rancho Los Cerritos provides visitors to the site the opportunity to explore the adobe abode, courtyard, surrounding grounds and museum to learn about this period in California history. Preservation of the unique cultural resources is essential to preserve one of the few remaining physical links to California's past.

The site at Rancho Los Cerritos is also expected to contain many latent archeological artifacts. In earlier excavations at the site, various artifacts dating back to the 1840's were discovered. Development of the proposed project could have a significant impact on this resource.

A series of mitigation measures are proposed to ensure that new construction and reconstruction and potential archaeological resources will be protected.

Significant Adverse Impacts, as defined by the California Environmental Quality Act will not occur.

VI. GEOLOGY AND SOILS

No Faults are known to underlie the site, nor is the site in a designated tsunami influence area. Based on the Seismic Element, the liquefaction potential is considered low.

Rancho Los Cerritos is in the process of a seismic upgrade on the original Adobe Ranch House.

All new construction at the Rancho must conform with the Uniform Building Code, which will decrease the risk associated with seismic activity.

Significant Adverse Impacts, as defined by the California Environmental Quality Act will not occur.

VII. HAZARDS AND HAZARDOUS MATERIALS

The project site is not known to store or contain hazardous materials that would pose a threat to the health and safety of individuals on the site, or those within the vicinity of the project. The project site is not located within two miles of a public or private airport, and while large trees and other vegetation surround the site, the project site is not located within an area subject to wildland fires.

Significant Adverse Impacts, as defined by the California Environmental Quality Act will not occur.

VIII. HYDROLOGY AND WATER QUALITY

The project site is not located within a flood zone as designated by the Flood Insurance Rate Map July 6, 1998. Development of the proposed project will include the development of new structures to facilitate the long term objectives and goals of Rancho Los Cerritos. These structures will have a marginal effect on the site's ability to absorb water over that which currently exist. This marginal reduction in water absorption is not anticipated to substantially increase the volume or quality of water runoff from the site.
The project applicant must obtain a National Pollution Discharge Elimination System permit before construction grading occurs.

Significant Adverse Impacts, as defined by the California Environmental Quality Act will not occur.

IX. LAND USE AND PLANNING

Rancho Los Cerritos has been an established part of the community since 1844. The zoning for the proposed project site is Institutional (I). The implementation of the Master Plan for the Rancho is in conformity with the zoning code for the site. However, adjacent land uses to the proposed project site are zoned as Single Family Residential Large Lots, (R-1-L) zone, which is considered a sensitive land use. Development of the proposed project could impact this land use.

The proposed project decreases the number of on-site parking spaces and will not meet the Zoning Code requirements. A Standards Variance will be required to reduce the number of on-site parking spaces from 34 to 24. (Further discussion in the Transportation Section).

A series of mitigation measures are being required to protect the residential area from construction equipment impacts.

Significant Adverse Impacts, as defined by the California Environmental Quality Act will not occur.

X. NOISE

Implementation of the Master Plan for Rancho Los Cerritos and development of the proposed improvements are expected to generate an increase in visitors to the site. This expected increase is anticipated to increase the ambient noise levels during the Rancho's operating hours. In addition special events at the Rancho will also increase the ambient noise level during the event.

A series of mitigation measures that will insure that increased noise from the project during operation and construction, will not have a significantly adverse

impact on the adjacent residents.

Significant Adverse Impacts, as defined by the California Environmental Quality Act will not occur.

XI. POPULATION AND HOUSING

Development of the proposed project and implementation of the Master Plan for Rancho Los Cerritos is expected to increase the number of visitor to the site. However, the increase in visitation to the Rancho is not expected to translate into an increase in demand for housing in the City of Long Beach or surrounding communities. In addition, the level of employment at the Rancho is relatively small and not anticipated to have a significant impact on housing stocks.

Significant Adverse Impacts, as defined by the California Environmental Quality Act will not occur.

XII. PUBLIC SERVICES

All public services are adequate to meet the demand placed on them by the proposed project, and continue to meet the needs of the rest of the community.

Significant Adverse Impacts, as defined by the California Environmental Quality Act will not occur.

XIII. RECREATION

Responsibility for management of Rancho Los Cerritos is maintained within the City of Long Beach Department of Parks, Recreation and Marine. Development of the Master Plan and the proposed project for Rancho Los Cerritos will improve the both the recreational and education quality of the Rancho. By improving visitor accommodations and restoring portions of the Rancho the City would be preserving an important aspect of the City's history and expanding the opportunity for visitor enjoyment of this facility.

Significant Adverse Impacts, as defined by the California Environmental Quality Act will not occur.

XIV. TRANSPORTATION

Development of the proposed project and implementation of the Master Plan for Rancho Los Cerritos is expected to generate additional traffic levels over those that currently exist. Access to the site is obtained by traveling on two predominately residential streets. The street leading to the site, Virginia Road, is lined by well-maintained estate type homes. Development of the proposed project could increase the traffic volume using these residential streets. In

addition, limited parking within the site may require vehicles to park on the street out side the Rancho.

The Traffic Study by Linscott Law & Greenspan Engineers indicates that levels of service at Long Beach Boulevard at San Antonio Drive and at Virginia Road at San Antonio Drive, will not be significantly adversely affected.

The proposed Rancho Los Cerritos Master Plan will reduce the number of on-site parking spaces from 34 to 24. In addition, the Rancho uses Virginia Road, a public street, to park special event visitors. The Rancho does not have a permanent off-site parking area to accommodate these visitors. The portion of Virginia Road used to park visitors is surrounded by the open space of Virginia Country Club golf course, thus not directly impacting residential uses. However, this lack of on-site parking will cause a significant impact under CEQA.

The lead agency will be required to adopt a "Statement of Overriding Considerations" prior to approval of the Los Cerritos Master Plan.

XV. UTILITIES AND SERVICE SYSTEMS

Development of the proposed project and implementation of the Master Plan at Rancho Los Cerritos, is not expected to significantly increase the demand for utilities and services over that which currently exist.

Present drainage capacity is expected to be adequate to accommodate project demands, and no new treatment facilities would be required for development of the proposed project. While the Rancho will construct new structures on site, additional water runoff is expected to be marginal due to the size of the structures and the sites soil capacity to absorb water.

The Proposed Site will have and a temporary increase in solid refuge due to excess building materials during the construction of the building on site. In addition, increased visitation to the site will also generate additional refuge. However the increase in refuge will have no significantly impact on the waste disposal capabilities of the city.

Significant Adverse Impacts, as defined by the California Environmental Quality Act will not occur.

ALTERNATIVES

The California Environmental Quality Act (CEQA), in Article 9, Section 14126(d), requires that all Environmental Impact Reports include a discussion and comparison of potential alternatives to the proposed project that could feasibly achieve similar objectives. The discussion and analysis should focus on potential alternatives that may be able to reduce some or all of the significant adverse impacts associated with the proposed project to a level of insignificance.

This section examines feasible alternatives to the proposed project.

Alternative 1: No project

Alternative 2: Increased on-site parking

Alternative 3: Partial Project

The above alternatives are discussed in detail in the following sections. The sections compare the impacts of the alternatives to those that are anticipated to result from implementation of the proposed project for resource categories where there is a substantial difference. This comparison is accomplished using the term "increased" in reference to impacts that will be greater or more negative than the proposed project, and the term "decreased" in reference to impacts that will be more beneficial or less negative than the proposal. Some impacts may be both positive and negative relative to the proposed project, which are referenced as "mixed", while others may be basically the "same" as the proposed project.

Article 9, Section 15126.6 of the CEQA Guidelines requires that:

> "...alternative projects include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects."

Alternative 1: The following alternatives have been selected as required by CEQA. The "no project" alternative is required by Section 15126.6(e).

Alternative 2: The "increased on-site parking" alternative was selected because the proposed project's on-site parking is inadequate. This inadequate condition will exist during the Rancho's special events and is the only significant environmental impact created by the Master Plan. For this reason, an "increased on-site parking alternative" will enable the decision makers to understand the relationship between on-site parking requirements and the cultural and educational objectives established by the proposed project's Master Plan.

Alternative 3: The "partial project" alternative was selected because it will partially affect the basic cultural and educational goals of the Master Plan. However, the significant environmental impact of inadequate on-site parking will still exist.

An "alternative location" alternative will not be discussed because it is infeasible due to the very nature of the project. The land itself is the last of the remaining two ranchos, Rancho Los Cerritos and Rancho Los Alamitos. These ranchos were the precursors to Long Beach development. Moving the project to another site would totally defeat the cultural and educational experience that is the primary purpose of the Rancho Los Cerritos Master Plan.

Alternative 1 – No Project

CEQA requires that a "No Project" alternative be discussed. This alternative considers what the environmental impact would be of leaving the site in its present condition. Under this scenario, the proposed project would not be constructed. The Master Plan would not be implemented. Typically the "No Project" alternative will not result in any environmental impacts since no construction is involved.

Transportation/Traffic

Parking: Currently, Rancho Los Cerritos provides 34 parking spaces for use by employees, visitors, tour attendees and docents. During large and medium scales special events, the on-site parking lot is used primarily for event attendees and disabled persons parking. Rancho staff and event volunteers park their vehicles off-site during special events.

Parking spaces at Rancho Los Cerritos are "grandfathered" as legally non-conforming because it was built prior to current parking standards.

Under a "no project" scenario, the Rancho would continue to have 34 spaces. However, visitors to the Rancho will continue to park on Virginia Road because current on-site parking is inadequate for existing activities and special events.

Level of Impact Compared to the Proposed Project: Same

Cultural Resources

The no project alternative would continue the existing situation without meeting the objectives of the Master Plan. The primary objectives that would not be met are:

1. Conserve those areas and characteristics of the Rancho site that remain intact from the historic time periods;
2. Restore and maintain the remainder of the site to reflect the general image and character of the past; and
3. Preserve the structure and grounds of Rancho Los Cerritos and interpret the relationship of the Rancho's diverse peoples to the development of the Long Beach area.

Level of Impact Compared to the Proposed Project: Increased

Alternative 2 – Increased On-Site Parking

Existing

This alternative consists of providing more parking on-site. Currently there are 34 spaces on-site. Ten (10) of these spaces would be removed by the proposed Rancho Los Cerritos Master Plan. Currently, there is a parking lot located on the west side of the Rancho property that provides parking. This parking lot would be removed and the Visitor's Center will be constructed. The lot will continue to provide approximately six (6) parking spaces, primarily large disabled spaces. The remainder of that parking lot will be open-space.

Proposed in Alternative 2

In Alternative 2 the western parking lot would not be eliminated. As a result, the Visitor's Center would not be built. To provide approximately 15 additional parking spaces on the site, the area north of the Ranch House could be paved and striped. However, this is the proposed site for the Barns, which could not be reconstructed if the area is turned into a parking lot.

Alternative 2 would increase the current parking by approximately 15 parking spaces.

Transportation/Traffic

This alternative would reduce the number of on street parking required by the Rancho, but would prevent the construction of a Visitor's Center and the reconstruction of the Barn.

The increased on-site parking would be adequate to accommodate future daily peak parking requirements under the Master Plan. However, it would still be inadequate for special events, which will continue to require utilization of on-street parking on Virginia Road.

Level of Impact Compared to the Proposed Project: Same

Noise

Increased on-site parking would increase the amount of noise experienced by the adjacent residential uses. The northern parking lot would be within 50 feet of the adjacent residences to the north. In addition, a paved surface leading from the entrance of the Rancho past the Ranch House would be required to move cars through the lot to the northern parking lot.

Parking on Virginia Road is preferable to on-site parking because there are no adjacent residential uses to Virginia Road. It is surrounded by open space golf course.

Level of Impact Compared to the Proposed Project: Increased

Cultural Resources

Under Alternative 2, there would be no construction of the Visitor's Center or reconstruction of the Barn. These buildings are necessary to facilitate the goals and objectives of the Master Plan. If they are not constructed the following objectives will not be met:

1. Conserve those areas and characteristics of the Rancho site that remain intact from the historic time periods;
2. Restore and maintain the remainder of the site to reflect the general image and character of the past; and
3. Preserve the structure and grounds of Rancho Los Cerritos and interpret the relationship of the Rancho's diverse peoples to the development of the Long Beach area.

Level of Impact Compared to the Proposed Project Increased

Alternative 3 – Partial Project

This alternative assumes that only part of the proposed project be built. In this case the all of the project improvements would be implanted except for reconstructing the barns complex and barnyard.

Under Alternative 3 the Rancho would continue to keep staff offices in the Ranch House. In addition, they would continue to have to have public and educational assembly areas in the courtyard area of the Ranch House or outside on open air picnic benches.

Transportation/Traffic

Trip generation and the need for parking are based on expected growth over the next 25 years. The increase in visitors to the Rancho would be the same with or without the Barns Complex.

From a project operations basis vehicular trips generated by the Rancho at build out would be the same.

Level of Impact Compared to the Proposed Project: Same

Cultural Resources

The elimination of the Barns Complex will not allow the removal of staff offices from the Ranch House. This means that the part of the Ranch House that currently houses staff offices would not be available to be opened up to the public.

One of the cultural goals of the Rancho Los Cerritos Master Plan is to enhance the interpretative educational experience of the Rancho. The inability to open the entire Ranch House to tour and event participants will limit the future interpretive experience at the Rancho.

Level of Impact Compared to the Proposed Project: Increased

Noise

The elimination of the reconstruction of the Barns Complex will mean that groups and visitors to the Rancho will continue to congregate in the courtyard area and in the open area to the north of the Ranch House.

As attendance increases, these groups will increase in number, and because they congregate outside, noise will increase and may affect the adjacent neighborhood.

Environmental Superior Alternative

Each alternative has important environmental consequences. The "No Project" alternative is usually considered to be the environmentally superior choice since no action is taken and consequently there are no environmental impacts. However, in this case, with no Master Plan changes, the goals of the Master Plan will be adversely impacted, because there will be no reconstruction of the Barn, no construction of the Visitor Center, and no construction of the Caretaker's Residence, thus impacting the space available in the Adobe Ranch House for the interpretive experience.

Environmental Impacts in alternative 2 and alternative 3 are either the same or increased, making the project itself the superior alternative.

SECTION 2

INTRODUCTION

This Environmental Impact Report analyzes the potential environmental impacts of the proposed Rancho Los Cerritos Master Plan. The Master Plan provides for the Rancho to be upgraded over the next 25 years.

This EIR provides objective planning and environmental information to present facts and to guide and assist approving agencies and the public of the potential environmental implications that may result from full build-out of the project.

This Environmental Impact Report has been prepared in accordance with the guidelines established for such documents under the California Environmental Quality Act (CEQA) of 1970, as amended, and the State CEQA Guidelines. Supplemental guidelines for the preparation of the report were provided by the State of California Office of Planning and Research (OPR).

The principal objectives established under CEQA for environmental impact review are that (1) the process be an open one, and that (2) the report be an informational document, informing decision makers, technical reviewers, and the general public about the potential environmental impacts associated with the construction and operation of the proposed project. The Environmental Impact report is also required to propose and describe mitigation measure s that will reduce significant adverse impacts generated by the project, and to develop reasonable alternatives to the proposed project which may reduce these impacts while still achieving the goals and objectives of the project.

The California Environmental Quality Act Guidelines, under Section 15151, contains the following standards for Environmental Impact Report adequacy:

> "An Environmental Impact Report should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes an account of environmental consequences. An evaluation of the environmental effects of the proposed project need not be exhaustive, but the sufficiency of an Environmental Impact Report is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an Environmental Impact Report would summarize the main points of disagreement among the experts. The courts have looked not for perfection; but for adequacy, completeness, and a good faith effort at full disclosure."

In addition to these Guidelines, the State Resources Agency has indicated that its intent is to define a reasonable standard of adequacy for analysis and disclosure within Environmental Impact Reports, in order that the documents

would not result with the enormous and burdensome technical documents encountered in the past.

In order to comply with CEQA guidelines, the Initial Study for the proposed project was prepared and circulated and solicited public agency comments through distribution of a Notice of Preparation. The Initial Study document and comments received in response to the Notice of Preparation were the basis of the technical focus of the Environmental Impact Report.

The Environmental Impact Report is divided into nine major sections:

Project Description - Presents and discusses project objectives, project location and boundaries, specific project characteristics and a list of the permits, agreements, and approvals that the proposed project needs prior to construction.

Project Context – Provides context and background for the project through an overview and description of the environmental setting and historical setting of the proposed project site.

Cumulative Project Descriptions – Presents a compilation of related projects which, as of the date of this report, have been proposed, are likely to be constructed, or are likely to be occupied within the approximate time frame of the proposed project's completion (through the year 2004). These "related" projects, taken together with the proposed project, are the basis for the cumulative impacts analysis, which is presented in the Analysis of Environmental Issues Section.

Analysis of Environmental Issues – Describes existing conditions found at the project site and assesses the potential environmental impacts that may be generated by development of the proposed project. These potential project impacts are compared to thresholds of significance in order to determine their potential significance. Significant impacts are identified as those impacts which exceed the established thresholds. Mitigation measures, intended to reduce potential adverse impacts to acceptable levels are proposed where possible. Those impacts, which cannot be eliminated or mitigated to acceptable levels, are also identified. In addition, the cumulative impacts of development of the proposed project, in addition to related projects, are assessed.

Growth-Inducing Impacts – Identifies potential spatial, economic, or population growth impacts, both short-term and long-term, that may be created or fostered by development of the proposed project.

Alternatives – Presents and analyzes the potential environmental impacts of alternatives to the proposed project, including a no-project alternative. The impacts of these alternatives are then compared in relation to each other and in relation to those of the proposed project.

Organizations and Individuals Consulted – Lists all federal, state, and local agencies, community groups, and other organizations and individuals consulted during the preparation of this Environmental Impact Report.

Appendices – Includes copies of documents that were prerequisites to or are related to the preparation of this Environmental Impact Report, including the Initial Study, comments received in response to the Notice of Preparation, background data and studies utilized in preparation of this Environmental Impact Report.

SECTION 3

PROJECT DESCRIPTION

Project Name:

Rancho Los Cerritos
Master Plan

Location:

4600 Virginia Road
Long Beach, CA 90807

The proposed project site is 4.74 acres, located is in the Los Cerritos neighborhood. The site is adjacent to the Virginia Country Club to the east and south, and to nine-(9) single family homes on the west and north.

Ownership:

Phillip Hester
Director of Parks, Recreation and Marine
2760 Studebaker Road
Long Beach, Ca 90815

Beginning in 1943 the City of Long Beach began working to acquire the rancho as an historic site. Efforts for a combined purchase of the site by the City, County and State failed in 1945. Finally, in December 1954, under Resolution No. C-15278, the city of Long Beach leased the rancho for one year for $10,000 (to be applied to the purchase price) and reserved an option to buy it for $80,000, if the option were exercised by October 1955. The City, which had opened a museum on the site, decided to exercise the option but needed an extension until September 1956 to pay the balance of $70,000. The City was granted the extension and completed the purchase of Rancho Los Cerritos in that month for use as an historical monument, park and library. Its total cost amounted to $82,400. Rancho Los Cerritos was designated as a National Historic Landmark with appropriate dedication ceremonies on October 22, 1970.

As stated, the City of Long Beach owns the proposed project site and administers and maintains the site through the Department of Parks, Recreation, and Marine. The City holds title to the site and provides the entire funding for its operations.

The Friends of Rancho Los Cerritos area a volunteer support group which assists the site with its public programming and supports the educational and preservation mission of Rancho Los Cerritos. The Friends' primary mission is to

provide volunteer support for public programming and tours through an active docent program. The Friends support their activities primarily through donations, membership, dues, special events admissions and sales at the museum shop. Funds that are raised are used to pay for the cost of goods sold at the gift shop, special programs, small curatorial and gardening projects, and publicity.

The Rancho Los Cerritos Foundation was formed in 1994 and received its tax-exempt status, allowing it to become active, in 1996. The Foundation is primarily tasked with fund raising and development. The Foundation funded the Rancho Los Cerritos Master Plan, which is a development plan for the Rancho over the next 25 years. The scope of this Environmental Impact Report is to analyze the changes and improvements described in the "Master Plan" at potential build-out, 25 years from now.

The City of Long Beach will continue to support the Rancho's maintenance needs, daily operations, seismic retrofit work (currently being implemented), security and safety improvements and ADA upgrades (currently being implemented). In partnership with the City, the Rancho Los Cerritos Foundation will take the lead in raising private, corporate, and foundations funds for restoration, new construction including associated archaeological work, interpretive programming initiatives and other enhancements.

Applicant:

Rancho Los Cerritos Foundation
4600 Virginia Road
Long Beach, Ca 90807

Project Cost:

4.2 – 5.3 million dollars (1999 dollars)

The 1999 Master Plan:
Master Planning Background and Provisions for the next 25 years

Rancho Los Cerritos is a National, State and Local Historic Landmark owned and operated by the City of Long Beach since 1955 as a public museum and historic site. Built in 1844, the two-story Adobe and landscaped grounds echo with the rich history of Spanish, Mexican and American California and the families who helped transform southern California from its ranching beginning to a modern, urban society. As cattle and sheep pastures gave way to development beginning in the late nineteenth century, the cities of Long Beach, Lakewood, Bellflower, Paramount and Signal Hill grew up on the 27,000-acre Rancho. Today the site is open for public tours and offers garden activities, lectures and workshops, family events, school field trips, an active volunteer program and a California History Research Library.

In September 1997, the Rancho Los Cerritos Foundation contracted with a consultant team led by Architect Milford Wayne Donaldson, FAIA, Inc. to prepare a comprehensive master plan for the Rancho Los Cerritos Historic Site. The plan is designed to serve as a guide for site development and interpretation, and includes sections on structural and landscape restoration, maintenance, educational programming, visitor amenities and staff and collections needs. The plan provides for phased development over a 25-year period, and is estimated to cost between $4.2 and $5.3 million in 1999 dollars.

Historic Development and Designation

Guidelines have been prepared to assist Rancho Los Cerritos staff and their design consultants in rehabilitating structures within the Rancho Los Cerritos historic site. The guidelines are intended to be a design aid in determining acceptable alterations, additions and repairs for preserving the character of existing buildings and depicting, by means of new construction, the form, features and detailing of non-surviving site, landscape, buildings, structures or objects for the purpose of replicating their appearance at a specific period of time and in their historic locations. They are based on the Secretary of the Interior's Standards for Rehabilitation & Illustrated Guidelines for Rehabilitating Historic Buildings, published in 1992 by the National Park Service.

Following a decision approved by the Long Beach City Council in 1993, most alterations made in 1930-31 to the historic adobe and landscaped grounds shall be restored and preserved. However, the interpretive period will cover the years 1840-1940. Additionally, appropriate Preservation Briefs, the State Historical Building Code and Americans with Disabilities Act requirements will guide work.

The Interpretive Experience

The primary goal of the interpretive plan, based on Rancho Los Cerritios' Mission Statement, is to interpret the relationship of the Rancho's diverse peoples to the development of the greater Long Beach area. Emphasizing the years from the 1840s-1940s, interpretive programs will focus on three major themes: home, land and economic growth, and cultural diversity. The main interpretive method will involve living history actors who will portray "Visitors from the Past," assuming the role of historic characters and transcending time barriers to share their personal stories with visitors. These stories will reflect different eras, nationalities, cultures, economic activities and social pastimes. Each Visitor from the Past will present a different chapter in the Rancho's history, encouraging repeat visitation to explore additional stories.

Rooms within the historic adobe will be furnished to represent activities and lifestyles from the 1840s, 1870s and 1930s, with visitors progressing through time as they progress through the building. The different period room exhibits will provide a "stage" for interpreters from each of these time periods, and also allow

for comparison/contrast tours and exercises.

Other interpretive methods will include videos in the Visitor Center; small changing exhibits; lectures or workshops in the reconstructed nineteenth century barns complex, films; school lessons in the south wing classroom; demonstrations or hands-on activities; theatrical and musical performances; publications; and special events.

Educational Programs

The proposed Interpretive Plan allows the Rancho's popular fourth grade school program, Adobe Days Revisited, to continue with some modifications. Interpretive themes and site resources suggest exciting opportunities for new programs that will meet the goals of the history and Social Science Content Standards for the Long Beach Unified School District. Recommendations include an expansion of school programming in grades K- 12 and added internship possibi1ities, as well as the development of Teaching Training Workshops and collaborative projects with local colleges and universities. After-school and summer programs for children will also be developed to provide valuable services for the youth in our community.

TIME FRAME OF THE PROPOSED PROJECT

The Master Plan for the proposed project is divided into three major phases over a 25-year period. These are divided as such: Phase I, 1999-2004; Phase II, 2005-2014; and Phase III, 2015-2024.

Development at the site is prioritized as follows:

Urgent

Repairs and/or replacement immediately needed due to possible risk of life, property or for essential security.

High Priority

Repairs and/or replacement needed soon due to possible risk to life, property or for essential security
Replanting, repair and reconstruction to correct badly deteriorated features, improve appearance and facilitate overall maintenance.

Medium Priority

Items, which may take more time and/or funding to complete and which have less immediate impact on the appearance or function of the site.

Low Priority

Non-essential items, which can be deferred for 10-15 years, or those that are more costly compared to the benefit that they provide.

PURPOSE OF PROPOSED PROJECT and PROJECT NEED

The enhancement and renovation of Rancho Los Cerritos is a critical step in planning an appropriate means for traveling back into the past and understanding the proposed project site, its buildings and occupants, and how they have changed through the years. It will help continue the historic nature of the site and how it relates to Long Beach and the Southern California region; past and present. The goals of the proposed project are to include;

1. conserve those areas and characteristics of the Rancho site that remain intact from the historic time periods, and
2. restore and maintain the remainder of the site to reflect the general image and character of those periods of time.

Rancho Los Cerritos Master Plan

The Rancho Los Cerritos Master Plan is the principle document that brings together findings of the supporting studies and research and presents an integrated and phased implementation program. It illustrates the cultural and natural resources and includes a brief overview of its history and operations that best form the basis of the interpretation. The supporting studies involve the interpretive plan and the design recommendations are inclusive of the site, historic structures, programming and implementation concepts.

The specific objectives of the proposed project are:

1. Conduct, encourage, produce and share scholarly research on the history of Rancho Los Cerritos
2. Collect, preserve and manage appropriate authentic artifacts
3. Develop innovative and effective interpretive programs on Rancho Los Cerritos history.
4. Supplement the teaching of local and Southern California history in the classroom.
5. Encourage local history instruction in the schools and colleges.
6. Expand resources and increase accessibility of the archives, research files and research library.

PROJECT MISSION STATEMENT

The mission statement for Rancho Los Cerritos was developed by the National Endowment for the Humanities colloquium participants. *The mission of Rancho* Los Cerritos Historic Site is to restore and preserve the structures and the grounds, collect appropriate resources and interpret the relationship of the Rancho's diverse peoples to the development of the Long Beach area.

KEY PHYSICAL CHANGES TO THE PROPOSED PROJECT SITE

The Los Cerritos Master Plan calls for the following changes to the proposed site:

1. Restoration of the historic adobe to the 1930s era.
2. Restoration of most of the grounds areas to reflect Cornell's plans.
3. Seismic retrofit of the historic adobe to meet current codes. Compliance with ADA.
4. Upgrades to the security and safety of the site and structures.
5. Redesign and new landscaping of the entryway at Virginia Road, including signage improvements.
6. Construction of a Visitor Center, based on the pre-1834 Cota Adobe, providing visitor orientation and a museum gift shop, a docent changing area, a volunteer office, and public restrooms.
7. Reconfiguration of the main parking lot, to accommodate the new Visitor Center, removing all existing parking spaces, except, for the addition of four (4) additional handicapped parking spaces.
8. Construction of a new Caretaker's residence near the Virginia Road entrance.
9. Develop a parking new parking area for staff in the maintenance yard.
10. Reconstruction of the nineteenth century barns complex and barnyard.
11. Removal of the activity area from the southeast corner of the back garden.
12. Removal of the picnic area from the northwest corner of the property, and re-landscaping to reflect a native California landscape.
13. Construction of a rustic structure to house gardening tools and an exhibit workshop to replace the current trailer.
14. Removal of the 1980s public restroom structure.
15. Installation of perimeter landscaping to provide a dense barrier between the site and neighboring properties.

The current Visitor Center is located in the Ranch House garage area and be moved to the newly constructed Visitor Center. Also, the new Barns will house staff offices, archives and collections, additional restrooms, a small kitchen and a public assembly area. These activities are currently provided for in the Ranch House.

PROJECT DEVELOPMENT

The proposed project will be built in three-(3) phases, expected to last for approximately 25 years. Funding availability will help determine the timing of each phase of the project. Following is a description of the site improvements necessary to accomplish the project goals and objectives as discussed above:

Rancho Entrance and Driveway
The goal of the renovated entrance at Virginia Road is to provide a genuine and clear route, a "gateway" for visitors to access the Rancho, as well as to improve site security through technology, with a new gate and fence.

New Visitor Center/Decomposed Granite Driveway
Currently, the Rancho's visitor center and offices are located in the northern wing of the original adobe ranch house. The master plan proposed a new visitors center building, in the Cota adobe style using stabilized adobe bricks. This improvement allows more original ranch house space to be available to the public, enhancing the historic nature of the site.

The new Visitor Center will be located adjacent to the arroyo, in an area that was formerly a parking lot, created by the City. It will remove approximately 23 on-site parking spaces.

Inner Courtyard
Originally the inner courtyard was a work area. In the 1930s, it was landscaped and used by the Bixby family for entertainment and enjoyment. The goal of the master plan is to restore the courtyard to its 1930 condition.

1930's Garden and Forecourt
The 1930's garden area will be maintained and upgraded. It will be renovated and an automatic irrigation system will be installed. The lawn areas closest to the Adobe will have drains and catch basins installed to address the drainage problems.

The Forecourt is the original 1930 parking lot and has spaces for 11 standard cars. The proposed project intends to continue to use area to provide parking for 11 cars. The master plan specifically states that "Any effort to increase the on-site parking would be destructive to the historic and visual character of the ranch."

Staff Offices/Multipurpose Room/Library
These facilities are currently located in the Ranch House. In order to achieve the goal of restoring and opening the whole Ranch House for tours and to accommodate future programming at the Rancho, a new structure will be built. This structure is a reconstruction of the original barn that was previously located

on the Rancho site. The architectural design for the proposed facility protects the intrinsic character of the existing site, as well as the exterior integrity of the historic Barn.

The reconstructed barn will serve to house staff offices, a multipurpose room and library, and a collections and archival area. The multi-purpose room will seat about 80 people and include a state-of-the-art communications facility, a small serving kitchen and restrooms. The library and archival area will house all research materials and will have a collections storage area that is environmentally controlled and has enough room to expand.

Barnyard/Maintenance Yard/Staff Parking

The barnyard area will be open and un-landscaped as it was the area historically used to saddle horses and store buggies and supplies. It will be used as the central gathering space for interpretive opportunities and activities to help establish the site as an active learning center. There will be tour programs and historic demonstrations for children to experience life on a real working rancho. The barnyard will be oriented toward the center of the Rancho, away from the adjacent residences. The barn structure itself will serve as a buffer between the activities and the adjacent residential uses.

Nine staff and volunteer parking spaces will be added on the northeastern corner of the site, buffered on both sides by landscaping.

Restored Orchard/Ranch House Landscape

The 1931 restored orchard will replace the Mexican/Spanish tiled courtyard adjacent to the Ranch House. This courtyard was built by the City in 1981. The Orchard will be irrigated by small irrigation ditches to simulate an old farming irrigation system for demonstration purposes.

New Caretakers Residence

The Caretaker currently resides in the Ranch House. A new caretaker's residence is proposed to be located off the main entrance to establish a permanent presence and provide better security. There will be a large massing of shrubs that will buffer all sides and ultimately camouflage the residence from visitors. It will about 800 square feet.

Restrooms

The existing restroom facilities were built in the 1980s and are not in character with the existing site. This building will be removed and new restrooms will be added around the site, they will be accessible for persons with disabilities.

Arroyo/Open Space

The existing arroyo will be preserved in its natural state. It may be selectively replanted with alders, sycamores, cottonwoods, willows, and oaks.

Landscape Buffer
A landscape buffer will be provided around the perimeter of the Rancho. The existing six foot chain link fence will be removed and replaced with an 8 foot black vinyl chain link fence. This fence will be planted at intervals with flowering vines such as Honeysuckle.

Gardner's Storage Shed
A new storage shed will be constructed, and located at the northeastern corner of the site. The currently existing "trailer" will be removed.

Current Attendance

Current annual attendance at Rancho Los Cerritos is approximately 16,400 visitors. Of these visitors, 4,250 are 4th grade school children. On the average, 37 visitors per day tour the Rancho in the afternoon hours, Wednesday through Sunday. On the weekends, approximately 57 visitors tour the Rancho per day in the afternoon hours.

As previously stated, the Rancho is closed to the general public on in the morning hours. The Rancho typically schedules special classes or lectures in the morning hours so as not to conflict with the open hours. Average attendance for these types of activities is 10 persons per day during the week, and 15 persons per day during the weekend hours.

The remainder of the Rancho's attendance figure, comes from attendance of special events held at the Rancho.

Projected Attendance

The Rancho Los Cerritos Master Plan, estimates that at the end of its phased improvement plan, 2024, a maximum of 32,800 persons will visit the facility per year. That number was broken down as follows
:

General Daily Tour	14,300
School Children	8,500
Special Events & Lectures	7,060
Misc. Site Uses (volunteer training)	2,960

Note: Although the maximum number is 70 children, four mornings a week, the full capacity is not always utilized. Therefore, the figure shown above represents the maximum possible annual capacity.

Daily Visitor Audience Projections

Currently the site is open to the public Wednesday through Sunday, 1-5 p.m. The applicant does not anticipate changing the hours of increasing the days of the week open to the public.

Large Scale Public Educational Events (defined as 600 people or less)
For the safety and protection of the site, the rancho has set a maximum site capacity of 600 persons per large-scale event. The Foundation has agreed not to increase the number of large-scale events beyond the current five for the next twenty years.

All other Uses

This use includes smaller focused events and lectures open to the public; volunteer and professional meetings and uses; and membership/donor cultivation uses. These events will be held in the new "barn" facility with a maximum occupancy of 80 persons per session.

Staff

The Rancho currently employs three-(3) full-time staff, one-(1) part-time custodian, one-(1) part-time volunteer coordinator, and two-(2) part-time interns. The proposed project projects that, at the time of build-out, the Rancho will employ an additional four-(4) full-time employees and five-(5) part-time staff members.

If the Rancho was to be built-out as described in the Master Plan, it would employee, seven-(7) full-time staff members and six (6) part-time employees.

Current Programming

Rancho Los Cerritos is open to the general public from 1 p.m. to 5 p.m., Wednesday to Sunday. In addition, the Rancho hosts a maximum of seventy 4th grade school children. The 4th graders visit the rancho because they are learning about California history in their classrooms. The school tours run from October through June, on Wednesday and Thursday mornings, from 9:30 a.m. to 12 noon. The primary mode of transportation for the children is by public school bus. The bus parks on Virginia Road while the children are visiting the Rancho.

Project Timing

The Master Plan outlines a series of improvements to be made to Rancho Los Cerritos for the next 25 years. If all of the financial resources were available, the ideal approach would be to improve the Rancho at once. However, due to

funding limitations, both for capital improvements, maintenance and operations, a phased development is proposed.

Normally, the best formula for phasing is to build specific parts of the Master Plan throughout, and not concentrate on one area only. The priority should be placed on orienting the visitor to the Rancho.

The phasing proposed for Rancho Los Cerritos is recommended in three phases. Refer to Appendices for detailed estimates and phasing. The general sequence is summarized as follows:

Phase 1 (2001 - 2004)

1. Install an eight foot high perimeter black vinyl chain link fence to be hidden by landscaping. The landscaping would provide visual screening from the neighbors.
2. Plant new landscaping along the chain link perimeter fencing.
3. Install a new fire hydrant on-site and fire alarm system within the historic adobe.
4. Install an adequate security system for the interior of the Ranch House.
5. Provide off-site directional signage to the Rancho.
6. Restore inner courtyard area.

Phase 2 (2005-2014)

1. Construct new entrance gate, fencing, mailbox, community refuse shelter and paving at Virginia Road entry.
2. Construct new Visitor Center and attached restroom facilities (Cota adobe).
3. Reconfigure parking/forecourt for visitor's parking. Relocate refuse shelter to southeast section of visitor's parking.
4. Construct Caretaker's residence
5. Construct new parking and driveway and gate control on site.
6. Construct new interpretive signage along entrance roadway adjacent to the arroyo.
7. Install a site perimeter security system and expand the security system to the new structures.
8. Provide temporary parking area for staff at the rear maintenance yard.
9. Begin limited upgrade for compliance to ADA issues of accessibility for the adobe. Special attention should be made to meeting ADA requirements at the north wing.
10. Improve accessibility throughout the site.
11. Plant the orchard garden.
12. Improve landscaping in the arroyo.
13. Plant the areas outside the brick courtyard walls on the Virginia country

Club side.
14. Repair the brick wall around the garden.
15. Rehabilitate the present Visitor Center (gift shop/garage) for classroom use.
16. Restore the interior of the east wing and south wing and restore kitchen for the new interpretive program.
17. Install the ADA lift at the classroom area for access to the verandahs and Ranch House.

Phase 3 (2015-2124)

1. Provide Historic American Building Survey drawings for Cornell's hedge and lawn area to the north of the servant's quarters.
2. Demolish Cornell's hedge and lawn area, concrete parking pad and other features north of the Rancho.
3. Demolish existing herb garden.
4. Construct new barn complex consisting of staff offices, library, archives, collection, meeting area and restrooms.
5. Demolish the 1980s restroom facilities.
6. Construct new toilet building adjacent to 1930s Gardener's House.
7. Reconstruct Cornell's garden design to the south of the lawn area.
8. Reconstruct new barnyard for special events including fencing, ramada, horno, and other associated features.
9. Construct new staff parking near maintenance yard.
10. Construct workshop/gardener's storage structure.

Daily Visitor Audience Projections

Currently the site is open to the public Wednesday through Sunday, 1-5 p.m. The applicant does not anticipate changing the hours or increasing the days of the week open to the public.

Large Scale Public Educational Events (defined as 600 people or less)
For the safety and protection of the site, the rancho has set a maximum site capacity of 600 persons per large-scale event. The City has agreed not to increase the number of large-scale events beyond the current five for the next twenty years.

In addition to the regular programming described above, the Rancho hosts "special events" throughout the year. The following table lists the 1999 and 2000 special events and the number of people that attended.

Special Events and Public Programs at Rancho Los Cerritos Historic Site during 1999

Date	Program	Times	Public Attendance
January 9	Lecture series, pt. 1 – gold rush	10-noon	21
January 30	Victorian Manners workshop	10-noon	53
February 13	Lecture series, pt. 2 – gold rush	10-noon	47
March 13	Lecture series, pt. 3 – gold rush	10-noon	21
March 23	Tea with Margaret Bixby living history	2:30-4 pm	46
April 10	Lecture series, pt. 4 – gold rush	10-noon	22
May 8	RLC Players -- Living history performance	5:30-7:30 pm	80
June 12	New Citizens Welcome	11 am – 2 pm	250
June 17	Third Thursday Summer Evenings – concert, picnicking and tours	5-7:30 pm	110
July 8	Children's Choice	1-4 pm	167
July 15	Third Thursday Summer Evenings – concert, picnicking and tours	5-7:30 pm	141
July 22	Children's Choice	1-4 pm	337
August 8	Mud Mania	12:30-4:30	570 (& 80 volunteers)
August 12	Children's Choice	1-4 pm	140
August 19	Third Thursday Summer Evenings – concert, picnicking and tours	5-7:30 pm	264
August 26	Children's Choice	1-4 pm	303
September 12	Chautauqua performance	5:30-7:30 pm	80
October 9	Antique Appraisal Affaire	10 am – 3 pm	286
November 13	Games Workshop	10 am – noon	9
December 3	Christmas Candlelight Tours	6-9:30 pm	220 (& 50 volunteers)
December 3	Christmas Candlelight Tours	6-9:30 pm	250 (& 50 volunteers)
December 12	Christmas Open House	1-4 pm	440

Table 1

Programs and Site Use at Rancho Los Cerritos Historic Site in 2000

Date	Program	Times	Area(s) used
January 8	Preservation Workshop, pt. 1	10 am – noon	Sunporch
February 12	Preservation Workshop, pt. 2	10 am – noon	Sunporch
March 11	Preservation Workshop, pt. 3	10 am – noon	Sunporch
April 8	Preservation Workshop, pt 4	10 am – noon	Sunporch
May 13	Restoration Fair	12:30-4:30 pm	Backyard, courtyard
June 15	Summer Concert Series	5-7:30 pm	Backyard
June 17	New Citizens Welcome	11:30 am – 1:30 pm	Backyard
July 20	Summer Concert Series	5-7:30 pm	Backyard
August 13	Mud Mania	12:30 – 4:30 pm	Backyard
August 17	Summer Concert Series	5-7:30 pm	Backyard
September 9	Sesquicentennial Program	5-9 pm	Backyard, courtyard
October 14	Antiques Appraisal Affaire	10 am – 2 pm	Backyard
December 3	Christmas Open House	1-4 pm	Backyard, courtyard, house
December 8	Christmas Candlelight Tours	6-9:30 pm	House, courtyard, backyard
December 9	Christmas Candlelight Tours	6-9:30 pm	House, courtyard, backyard
Wednesday thru Sunday, year-round	House and garden tours	1-5 pm	House, courtyard, backyard
Wednesdays & Thursdays – October - June	Adobe Days Revisited 4th grade school program	9:30-noon	House, courtyard, backyard
1st Sunday/ month	Guided garden tours	2 pm	Backyard, courtyard
July 4	Picnic for members	6-10 pm	Backyard
December TBA	Holiday Open House for members	5:30-7:30 pm	Sunporch
1st Mondays	Friends of RLC board meeting	7-9 pm	Library
2nd Thursdays	RLC Foundation board meeting	5:30-7 pm	Library
1st Mondays	Garden committee workday	9:30 – noon	Grounds
2nd Mondays	Garden committee crafts day	9:30 – noon	Library
2nd Tuesdays	Curatorial committee meeting	6 – 8:30 pm	Library

3rd Tuesdays	Curatorial committee workday	9:30 – noon	House
Thursdays, September-October	School docent training	9:30 am – 12:30 pm	House
Wednesdays, February-April	Docent training	7 – 9 pm	House
2nd Saturday in June	Friends of RLC Annual Meeting	9:30 am – noon	Backyard

Table 2

RANCHO STAFF

The Rancho currently employs three-(3) full-time staff, one-(1) part-time custodian, one-(1) part-time volunteer coordinator, one-(1) part-time horticulturist, and two-(2) part-time interns. The proposed project projects that, at the time of build-out, the Rancho will employ an additional four-(4) full-time employees and five-(5) part-time staff members.

If the Rancho was to be built-out as described in the Master Plan, it would employ seven-(7) full-time staff members and six (6) part-time employees.

DISCRETIONARY PERMITS REQUIRED

Certificate of Appropriateness
Standards Variance from Parking Requirements
Site Plan Review
City Council approval of the proposal

SECTION 4

PROJECT CONTEXT

Rancho Los Cerritos Historic Site is an outstanding example of nineteenth century ranch. The site offers a rare opportunity for visitors to learn about both local and regional history. The two-story adobe (ranch house) and garden surroundings tell the story of an earlier time-when cattle instead of condominiums dotted the southern California landscape. Because the site is buffered by the Virginia Country Club golf course, Rancho Los Cerritos continues to feel rural rather than suburban.

Rancho Los Cerritos, with its twenty-two ground floor rooms and intimate courtyard, possesses an outstanding potential for interpretation of historical themes beginning with the period of Native American occupation and continuing through the romanticized Spanish Colonial Revival period of the 1920s and 1930s. The story of Native American occupation, Manuel Nieto's great land holdings, John Temple's initial efforts at cattle ranching, and the Bixby family's sheep-ranching enterprises coupled with other business ventures parallels the development of southern California. The story clearly illustrates how "the pastoral ranch system of Hispanic culture retreated before large scale crop production, small farm subdivision, and urbanization brought about by Anglo-American settlers after California became a state." With its present museum collections and trained staff, Rancho Los Cerritos will continue to function as a learning experience for youngsters and adults alike.
Summary of Historical Site Conditions

Los Cerritos was once a part of an early two-part Spanish land grant of 300,000 acres given to Manuel Nieto in 1784 and 1790. A portion of the land was purchased from one of Nieto's heirs by John (Don Juan) Temple. In 1844, Temple began construction of the ranch house.

Upon completion, Temple's house was probably one of the largest and most impressive domestic adobes of its time for colonial Southern California, and his extensive gardens were unique for the time period.

Temple built the ranch house as a country home and headquarters for his cattle ranching operation. The house blended traditional Spanish/Mexican features with attributes of the Monterey style of architecture. The two- and three-foot thick walls of the house were made from sun-dried adobe, made at the nearby river. The approach to the house was through a large gate in a high adobe wall that enclosed the large, 140 foot long, central courtyard. This courtyard was planted minimally and intended for basic ranch business. It was the work yard where horses, carriages and buggies were saddled and prepared. The two wings contained foreman's quarters, storage rooms and shops that opened into the courtyard with supplies, tack rooms, blacksmithing, laundry and cooking facilities.

There were also water troughs and hitching posts. It was probably due to John Temple's travels, local availability and back east connections that his large 1850s garden appeared to be a mixture of New England and subtropical influences. This garden was about two acres in size and was enclosed entirely by the building and a ten to twelve-foot tall wood fence. His main residence was in Los Angeles but he spent a lot of money on his garden at Rancho Los Cerritos.

Photo documentation shows planting that included: apples, oranges, figs, olive trees, peaches, pomegranates, tall Italian Cypress, and locusts. There were formal raised beds containing roses, grape vines, and other flowers. There were earlier references to Temple's garden style as being Italian, however most feel that it probably referred more to its formal layout rather than its Mediterranean resemblance. There was also a summerhouse, built either by Temple or Bixby, which offered a cool retreat for relaxation.

Other buildings and site features surrounding the adobe as described in 1957 by Anne Bixby Chamberlin, Sarah Bixby Smith's sister when she was 83 years old, were a barn, brick oven, com crib, sheds, windmill, wool barn, corrals, a dip for the sheep after they had been sheared, a fine sheep barn, a "Flea House" and a granary.

In 1866, Temple sold Los Cerritos to Flint, Bixby & Co. for $20,000 in gold. A few physical changes were made to the ranch. The flat roof of the two-story section was replaced with a wood shingle gable after 1866 by the new occupant, Jotham Bixby. Before 1881, Bixby added gabled, shingled roofs to both wings.

Two Moreton Bay Fig trees were planted together by 1880 at the corner of one of the rectangular planting beds and eventually grew into one tree. The fig tree now has a spread of over eighty feet. The family also constructed ten wells and a windmill to provide a reliable source of water to the house and gardens.

The excitement of the sheep industry lasted 10-15 years, but by the late 1870s, the Bixbys recognized the economic advantages of colonization and sub-division. The family sold or leased other parts of land for dairy farms, crops and townships and the era of big ranches faded away. Over the next 40 years many different tenants occupied the ranch. Outbuildings eventually fell into disrepair and were removed.

Rancho Los Cerritos was renovated for use as a private residence in 1930-31 by Llewellyn Bixby Sr., a nephew of Jotham Bixby, with the guidance of Architect Kenneth S. Wing and Contractor C.T. McGrew and Sons. The renovation was extensive and followed the "Spanish Colonial Revival" Monterey architectural style. Renovations included a new red-tiled roof, courtyard landscaping, expanded rooms, electricity, heating, plumbing, fireplaces and a sun porch. The original configuration off Temple's adobe was left intact.

Llewellyn Bixby, Sr. commissioned well-known landscape architect Ralph D. Cornell to develop a master landscape plan for the adobe rancho. A number of different design themes were evaluated (and are documented) before one plan was finally selected. Some of the design elements included a sweeping main driveway from the south, incorporating layers of flowering and native plantings; and preservation of as many trees as possible from both the Temple and early Bixby eras. Cornell attempted to utilize flowers and shrubs that were known to have been acquired during Temple's time. From the Temple era, there are three of the five original Italian cypresses, offspring of the original black locust trees, three pomegranates, two olive trees and an Osage orange

In 1998, almost seventy years after the gardens were installed, many of the historic plantings are still alive and well. The majority of the historic theme plantings of Rancho Los Cerritos originate from Ralph Cornell's 1930 planting design. It is obvious that some of these plant materials have died, been removed or were relocated. The City of Long Beach may also have chosen, on many occasions, not to replace certain dead or dying plants based on budget, availability, suitability, convenience, protecting the adobe structure or maintenance (insects and disease problems).

The current landscape character of the adobe rancho has the ambience of an informal estate garden, nestled in a secure and well established residential community This feeling is accentuated as one drives to the rancho by way of tree lined Virginia Road through an exclusive neighborhood and past lush green country club grounds with notable home sites surrounding the adobe. The established plantings viewed along Virginia Road create an early Spanish Colonial Revival landscape of the 1920s.

The landscape begins to appear a little tattered as one drives past the country club parking lot entrance. The plantings along the roadside, prior to the Rancho entry gate, are primarily made up of Peppers, Acacias and others. A modem wooden sign and mailbox announce the ranch entrance and a large Pepper tree hides the gate. The entry into the Ranch does have a rustic and charmed feel to it and sets the stage for the adobe ranch and garden. The visitor passes through the historic-looking wooden gates and the right side of the sweeping driveway is lined with a dense variety of competing and overgrown plantings including acacias, peppers, eucalyptus and Toyo's. The ground plane is barren of groundcover and covered mostly with a leafed mulch material. The left side is taken up by a large natural-looking ravine or arroyo, which represents the last of the territory's open spaces. The scene changes as one travels up the sweeping driveway past a modem-looking restroom facility, located off the driveway. It is from this point that one sees the tall, white courtyard walls that are semi-covered with massings of red flowering Bougainvillea vines. These courtyard walls were built around 1980- 81, and enclose the courtyard, a tiled reception patio area and a small fountain. There were many exotic fruit trees removed from this area to make room for the courtyard. Additional plants around the adobe were also

removed to help minimize water damage to the adobe walls.

A small parking lot dating from the late 1950s, next to the arroyo, is visible north of the restroom. There is also an adjacent median full of toyon and berry shrubs hanging over the drive. The asphalt forecourt, south of the adobe, provided parking adjacent to the 1931 remodeled entrance to the Bixby residence. Both of these parking areas exist today and provide the only dedicated on-site parking.

Within the historic adobe's U-shape is an inner courtyard. This once-barren work court was laid out by Cornell as a garden retreat incorporating brick walkways, a raised brick terrace, lily pond and a lush lawn area surrounded by landscaping of citrus, sycamores, boxwood hedging, mock oranges and other plantings.

The back garden area, redesigned by Cornell, includes a large lawn area encircled by flowering trees and shrubs. Cornell salvaged many of the original trees from the Temple and Bixby eras. A network of decomposed granite walkways surround the garden with a brick walkway crossing the lawn area between the adobe and country club. A gazebo representing the "summer house" as quoted by Sarah Bixby Smith in Adobe Days, was replicated in 1976 from old photos but not placed in its original location. The entire back garden retreat is surrounded by a -five-foot high painted brick wall that separates it from the service yard and forecourt. An arbor, (1931) extends north of the adobe's veranda, and in 1988, picnic grounds were added to the northwest side of the ranch, adjacent to existing residential properties

The maintenance yard's perimeter is lined on one side with a six-foot high chain-link fence, old Pepper and Locust trees. A portable trailer is used for collections storage. The area is used for composting green waste and for the storage of mulch, and there is a series of bins for these purposes

Summary of Architectural Conditions in 1998

The Ranch House, a two-story central adobe structure, is 80 feet long or 102 feet in length including the wooden verandas. The rooms are about 15 feet wide in the interior, with an overall exterior building dimension of 24 feet. From the finished floor to the top of the roof joists, it measures approximately 17'- 7". The building's wings measure a rough 143 feet in length. The wings are 15'wide on the interior (the exterior dimension is 19 feet) and approximately 19-3 " high.

Since the initial conservation assessment conducted in 1993, the building continues to be in good structural condition, although it does not meet current seismic code requirements. The walls are built with two and three-foot thick adobe brick walls, plastered with Portland cement and painted. The original adobe was mud plastered and whitewashed. Archaeological investigations carried out by Greenwood and Associates in 1987 revealed the absence of a foundation. The adobe blocks were laid directly on the earth in shallow trenches.

The Master Planning Process

In 1990, a self-study of Rancho Los Cerritos was conducted by a 17-member Advisory Task Force appointed by the Mayor of Long Beach. After months of study, Task Force Members identified local criteria necessary for the site's health and success but requested professional assistance to establish significance for site use.

In May 1991, Rancho Los Cerritos received a self-study grant from the National Endowment for the Humanities (NEH) to bring in authorities in the areas of historic site interpretation, history and architecture. The consultants, together with the Chair of the Task force's site Use sub-Committee and the museum's Historic sited Officer and Historical Curator, evaluated the historic resources at the site and drafted a mission statement. The statement identified interpretive themes and sub-themes and proposed an interpretive plan for the site.

The Master Plan is designed to serve as a guide for site development and interpretation, and includes sections on structural and landscape restoration, maintenance, educational programming, visitor amenities and staff and collections needs. All recommendations, in the Master Plan, are consistent with the Secretary of the Interior's Standards for Rehabilitation, for State Historical Building Code, the Americans with Disabilities Act, the California Administrative Code (CAC), Title 24, and appropriate National Park Service Preservation Briefs.

Rancho Los Cerritos Master Plan Public Meeting Process

In order to provide as much public input and participation as possible in the Master Planning process, an 18-member Advisory Committee was put together, to review and make recommendations to the consultants that wrote the Master Plan. The Advisory Committee reviewed materials that were mailed to them, and met as a group in January, March, April, June and July of 1998, and in March of 1999.

The Advisory Committee members represented the following organizations:

Friends of Rancho Los Cerritos
Department of Parks, Recreation & Marine; City of Long Beach
Public Corporation for the Arts
FAIA
Neighborhood & Preservation Officer, City of Long Beach
ASLA (American Society of Landscape Architects)
LBUSD Teacher Resource Center
NUVIS (landscape architecture)
Recreation Commission, City of Long Beach
Junior League of Long Beach
CSULB Recreation and Leisure Studies
Long Beach Heritage

Long Beach Public Library
Private Realtor

An all-day community workshop was held on March 28, 1998, which included approximately 70 invited guests and the Master Plan Advisory Committee members. The workshop was held to collect more comments and recommendations for consideration in the Master Plan.

In addition to the above activities; consultants, foundation members and Rancho staff met several times with representatives from Virginia Country Club, the Long Beach Police and Fire Departments, State Historic Preservation Office.

Rancho staff and consultants were particularly interested in keeping their adjacent residential neighbors informed of the progress of the Master Plan and encouraging them to attend community meetings and make comments and recommendations on the Master Plan. They met with most of the neighbors in April 1998 and in the summer of 1998.

The following table describes the issues and concerns that came out of the Master Planning Process, along with recommendations for resolution of the issues.

See Table 3

Rancho Los Cerritos Master Plan – Key Issues & Resolution

Issue	Concerned citizen(s)/ group(s)	Resolution in master plan
Privacy	Neighbors below Rancho	1. Extend chainlink fence to height of 8-feet and plant with dense vegetation 2. Eliminate windows on the west side of the reconstructed barn 3. Leave Arroyo in natural state 4. Maintain northwest corner of property as a passive area; remove picnicking 5. Build road turn-around outside Rancho gates
Security	Neighbors below Rancho; Virginia Country Club	1. Extend chainlink fence to height of 8-feet and plant with dense vegetation 2. Build caretaker residence adjacent to VaCC fence/ parking lot 3. Upgrade gate security with cameras, state-of-art technology; see-through iron gate.
Eliminate some parking spaces from site	General concern of all parties	Retain status quo with 1) overflow parking on Virginia Road; 2) parking assistance during events; 3) park staff and volunteers off site and shuttle in. Add overflow parking sign info in forecourt parking area; and provide natural pathway, benches and interpretive displays along driveway for visitors walking in from Virginia Road. No other solution could be found; and most felt that parking in front of the reconstructed Visitor Center would destroy the historical views and create safety issues between car traffic and visitor assembly.
Provide diagonal, striped parking on Virginia Road	Neighbors below Rancho	Drop plan and retain status-quo: unstriped parking parallel to roadway
Use arroyo space for parking or Visitor Center; and for hiking trail	Neighbors below Rancho; most members of the MP Advisory Group	There will be no development in the arroyo--open space will be retained; access into the arroyo will be discouraged
Neighbors leave trash on Virginia Road below Rancho	Most parties	Rancho will build a trash enclosure for neighbors' use
Location/construc-tion of caretaker residence	Member of MP Advisory Group and one of the Cultural Heritage Commissioners	Remains in location as planned; overriding support for residence from all others

Table 3

Issue	Concerned citizen(s)/ group(s)	Resolution in master plan
Barn reconstruction (don't want a barn in their neighborhood)	Two neighbors below Rancho	1. Will build with no windows to the west 2. Will extend perimeter fencing and plant well before barn construction, to establish visual barrier
Picnicking near fenceline	Neighbors below Rancho	Removed picnic tables; established picnic area for school children within new courtyard
Removal of 1930s hedge to make room for barn complex	Rancho's contract horticulturist	Hedge will be removed after fully documented; State Historic Preservation Officer and Cultural Heritage Commission supportive

SECTION 5

CUMULATIVE PROJECT DESCRIPTION

The California Environmental Quality Act (CEQA), in Section 15355, defines "cumulative impacts" as two or more individual effects that, when considered together, are either considerable or compound other environmental impacts. These cumulative impacts are the changes in the environment that result from the incremental impact of development of the proposed project and other nearby related projects. For example, the traffic impacts of two projects in close proximity may prove to be insignificant when analyzed separately, but could have a significant impact when the impacts of the projects are analyzed together. The method of cumulative impact analysis used in this document allows the Environmental Impact Report to provide a reasonable forecast of future environmental conditions that can more accurately gauge the effects of a series of projects.

The proposed project is located in a built-out, single family home residential area, adjacent to a private country club, Virginia Country Club. Virginia Country Club is in the process of creating a Master Plan for their future development. However, Virginia Country Club has not submitted any applications to the City regarding their plans.

Additional traffic generated by the potential 25-year build-out of the Los Cerritos Master Plan generates an additional 94 (2-way) trips per day. These trips will be attributed to increased administrative and volunteer arrivals and departures, as well as increased attendance for general tours and school tours.

However, this increase does not significantly affect "level-of-service" at either the Long Beach Boulevard and San Antonio Drive intersection or the Virginia Road and San Antonio intersection.

Planning staff has consulted with the staff of Community Development, Parks and Recreation and the Rancho Los Cerritos staff. There are no known projects, which are under agreement in the entitlement process or under construction within influence of the proposal, as defined by the California Environmental Quality Act.

SECTION 6

ANALYSIS OF ENVIRONMENTAL ISSUES OVERVIEW

An Initial Study prepared and distributed by the City of Long Beach Planning Commission in accordance with California Environmental Quality Act (CEQA), found that the proposed project had the potential to have a significant effect on the environment and determined that an Environmental Impact Report should be prepared.

As required by the CEQA, analysis of the potential environmental impacts of development of the proposed project has been completed. The following potential impact areas were identified in the Initial Study as needing specific analysis for this proposed project.

Aesthetics
Agricultural
Air Quality
Biological Resources
Cultural Resources
Geology and Soils
Hydrology
Land Use and Planning
Noise
Population/Housing
Public Service
Transportation
Utilities

In terms of format, the impact analysis section for each issue addressed is presented in five subsections as described below:

Existing Conditions – This subsection provides information describing the existing conditions on or surrounding the project site, which may be subject to change as a result of development of the proposed project.

Project Impacts – This subsection provides information on the characteristics of the proposed project which would have an effect with regard to the environment in and around it, the nature and extent to which the project is expected to change the existing environment, and whether or not the project impacts meet or exceed the threshold levels of significance (as defined in the following section).

Mitigation Measures – This subsection identifies specific measures proposed to reduce the significant adverse impacts identified.

Cumulative Impacts – This subsection discusses the combined effects of development of the proposed project and the other nearby projects which are either under formal agreement with the Redevelopment Agency, City, of Port, in the formal design, permitting, approval process, or under construction. Development of these related projects in conjunction with proposed project development may have impacts beyond those of development of any of the single projects.

Unavoidable Adverse Impacts – This subsection identifies the residual effects of the proposed project development which will result even after the proposed mitigation measures have been implemented.

THRESHOLDS OF SIGNIFICANCE

The criteria for determining the significance of project impacts for each environmental issue addressed in this report are indicated below. These criteria are based on the Long Beach Redevelopment Agency's guidelines for the implementation of CEQA, and additional input garnered through discussions with City staff. Should the proposed project impact levels met or exceed these limits, then a significant adverse Impact would occur. The significant adverse impacts created or generated by the proposed project are identified and analyzed within the respective subject sections of this report. Identified impacts that do not exceed the established thresholds are not considered significant.

Land Use. Non-conformance with the applicable goals, objectives, and requirements of the City of Long Beach General Plan, Zoning Ordinance, Redevelopment Plan Local Coastal Plan or Tidelands Trust.

Population. A substantial increase in the resident, employee, or user population, population growth attributable the project which exceeds established City/General Plan forecasts, Southern California Association of Government's (SCAG) regional Growth Management Plan forecasts or displacement of a large number of people due to the proposed project.

Housing. The creation of project-related housing growth or demand which would exceed project-related employment opportunities and anticipated local and regional growth as specified in the City of Long Beach General Plan and Southern California Association of Governments Growth Management Plan.

Earth (Geology). Project grading or construction which would cause displacements, compaction, or overcovering of soil such that the proposed project's development poses as reasonable probability of endangerment by ground failure or other hazards to people or on-site or off-site structures, or if a unique physical feature is damaged, destroyed or created. Development in an Alquist-Priolo Zone would be considered significant.

Hydrology and Flooding. Production of runoff, which cannot safely be accommodated within the downstream flood control system or development within a 100-year floor zone or area susceptible to inundation from dam failure.

Air Quality. Generation of daily emissions greater than threshold criteria suggested by the South Coast Air Quality Management District (SCAQMD). The following is a list of SCAQMD's suggested threshold criteria by pollutant:

Carbon Monoxide	550 lbs per day
Sulfur Dioxide	150 lbs per day
Nitrogen Oxides	100 lbs per day
Particulate	150 lbs per day
Reactive Organic Gases	75 lbs per day

If the project contributes substantially to an existing or projected air quality violation or exposes sensitive receptors to substantial pollutant concentrations, the impacts will also be considered significant.

Traffic and Circulation. Traffic operational levels will be measured in terms of the Intersection Capacity Utilization (ICU) indices for intersections in the vicinity of the proposed project, based on the critical movement analysis techniques discussed in the Highway research Board's Circular 212 manual. The ICU index ranges from 0.00 (free flow conditions) to in excess of 1.00 (with 1.00 representing the theoretical design capacity of the intersection). Values of the ICU index are used to estimate the levels of service (LOS) at critical study intersections, as indicated below.

Level of Service	Range of ICU Values
A	0.00 - 0.60
B	0.61 - 0.70
C.	0.71 - 0.80
D	0.81 - 0.90
E	0.91 - 1.00
F	1.01+

Impacts are considered to be significant if traffic/circulation increases generated by the proposed project will result in (1) an intersection's level of service (LOS) falling below the minimum acceptable LOS of D established by the City of Long Beach, or (2) a substantial worsening of the level of service of an intersection which currently operates at a Level of Service E or F.

Parking. The adequacy of the project's parking facilities will be measured against standards observed and established for similar facilities in the region. If

the project's parking provisions do not meet or exceed these standards, the project will be judged to have a significant adverse Impact with regard to parking.

Biological Resources. Substantially affects a rare or endangered species of animal or plant or habitat of the species or interferes with the movement of any resident or migrating fish or wildlife species.

Energy. Project development which would result in the need for new energy supplies not available from existing generation resources is significant.

Noise. Generation of post-construction noise levels which exceed the State Health and Safety Code Standard of 65 dBA Ldn for exterior space and 45 dBA Ldn for interior space in hotel uses and 70 dBA Ldn for exterior space and 50 dBA Ldn for interior space in auditorium uses (arena, theater, exhibit hall, and meeting rooms) or otherwise violates the City's Noise Ordinance.

Public Services. Responses from the responsible public agency or jurisdiction will indicate whether, in their estimation, additional demand generated by the proposed project for public services will be able to be adequately accommodate (i.e., fire flow requirements, response times, etc.). If such demand cannot be met without substantial cost or more than 10 additional personnel or infrastructure, project impacts will be considered significant.

Recreation. Cause an unmet demand for recreation and/or conflict with adopted recreation policy.

Utilities. Responses from the responsible public utilities or the City Engineer will indicate whether, in their estimation, demands for utility service created by the proposed project can be adequately served by existing supplies, facilities, and service lines. If such needs cannot be met without substantial additional cost in personnel or infrastructure, project effects will be determined significant.

I. AESTHETICS

Existing Setting:

The Los Cerritos Rancho is located on top of a small hill, elevated above the nine adjacent residences built at the base of the hill. The adjacent homes open on to the Virginia Country Club golf course. A small private road separates the homes from the Rancho property. Because the Rancho is elevated, the primary view for the residential neighbors is that of the peripheral vegetation. Some of the neighbors located adjacent to the eastern end of the Rancho may be able to see the top portion of the Ranch House. The trees and bushes that ring the Rancho serve as a visual asset and buffer the adjacent residences from the structures at the site. However, currently there are areas that are not completely screened from the adjacent residences.

The Rancho has very mature vegetation, both in the garden areas and on the perimeter of the site. Also in existence is an arroyo that remains in a natural state. The rural appearance of the Rancho is complementary to the Virginia Country Club Golf Course that is adjacent to the eastern border of the site.

The site is designated as a City historic resource as well as a National and State Historic Landmark and is on the National Register of Historic Places. The proposed project will not demolish or visually alter any of the historically significant buildings on the site or the garden areas.

Anticipated Impacts:

The proposed project calls for removal of the existing perimeter chain link fence, replacing it with an 8 foot black vinyl chain link fence with no barbed wire. The fence will be planted at intervals with flowering vines such as Honeysuckle and Morning Glory. Also additional small trees and medium sized shrubs that were historically utilized at the site will be planted to provide an eight to ten foot tall screen to visually block out adjacent residences and country club facilities. Rubinias (black locust trees) will be planted to replace any that require removing because of age or disease. Proposed shrubs for the perimeter planting are Ribes speciosum (Fuschia flowering gooseberry), Mahonia nevinii (Nevin barberry), and Carpenteria california (bush anemone).

The following changes to the existing Rancho, are part of the 25-year Rancho Los Cerritos Master Plan. If improperly executed, these alterations and additions could have a significant impact on the historic nature of the site. For a complete analysis of these issues, please see Number V. Cultural Resources.

The existing restrooms will be demolished. This building was added by the City and is not historically significant.

The City built western parking lot (not historically significant) will be demolished and a new Visitor's Center will be built that will conform to historic standards established by The Secretary of the Interior's Standards for Treatment of Historic Properties. It will be a two story structure that measures 50 x 27 feet per floor, with 1,932 square feet of usable space. The remainder of the parking lot area will be treated with decomposed granite. Boulder outcroppings will be placed just north of the new Visitor's Center to act as ballards to help direct traffic away from the outdoor reception/seating area. The use of natural materials will actually improve the natural state of the site. The Visitor's Center will be sited at the edge of the existing arroyo, screening it visually from the adjacent homes.

The inner courtyard area will be restored to the original state of the Bixby's 1930 remodel.

A new 800 square foot caretaker's house will be built just north of the main entrance gate at the site. Some of the existing shurbs will be removed, however, new large shrubs will be added to buffer all sides and ultimatley camouflage

The new "barn" facility will be a reconstruction of the original barn that existed on the site when it was a working Rancho. It will be built on the northern edge of the property, approximately 30 feet from the property line. The structure will be oriented to the south, towards the Ranch House. The rear of the "barn" will not contain any windows, and the main entrance to the facility is on the ground floor, from the south facing barnyard. The structure will be two stories above grade and one floor below grade. The main barn is 50 feet x 40 feet with the utility building being 80 feet x 20 feet, with a total usable space of 9,200 square feet. The new structure will house staff offices, provide a multipurpose meeting room (seeting approximately 80 people), and a library. The structure will be approximatley 28 feet tall, as measured from grade on the southern side of the building (barnyard).

The proposed setbacks for all new structures conform to the yard requirements of the zoning ordinance.

The Rancho Los Cerritos Master Plan guidelines for alterations, additions, and repairs for preserving the character of the site were based on the Secretary of the Interior's Standards for Rehabilitation & Illustrated Guidelines for Rehabilitating Historic Buildings, published in 1991 by the National Park Service.

In regards to alteration and installation of new perimeter landscaping changes, trees and shrubs used shall be limited to species identified as being planted at the Rancho prior to 1942, either by Temple, Jotham Bixby, or Ralph Cornell for Llewellyn Bixby.

Mitigation Measures:

A dense vegetation buffer shall be installed along the entire perimeter of the site and along both sides of the driveway entrance. The buffer shall consist of evergreen trees and large shrubs. Minimum installation size shall be 15 gallon and shall be spaced no greater than 6' on center.

To help insure that the adjacent residential residents' scenic vista of the Rancho is not significantly impacted; all new structures shall conform with Chapter 21.34, Institutional District , "setback" and "building height" requirements the Long Beach Municipal Code.

The "setback" requirements for the Visitor Center, Barn, and Caretaker's Unit are:

1. Front Yard	20 feet
2. Side/Rear Yard	15 feet (when adjoining a residential district)

The maximum height allowed is:

1. Principal Structure (Visitor Center and Barn)	30 feet, or 1 foot for each 2 feet of distance from abutting residential district
2. Accessory Structure (Caretaker Residence)	15 feet

Unavoidable Adverse Impacts:

None are anticipated.

Cumulative Impacts:

None are anticipated

II. AGRICULTURAL RESOURCES

Existing Setting:

The Rancho was originally a working ranch. However, today no such uses are in existence. The Rancho does not grow items for agricultural use on the property.

Anticipated Impacts:

None

Unavoidable Adverse Impacts:

None are anticipated.

Cumulative Impacts:

None are anticipated

III. AIR QUALITY

Existing Setting:

The Rancho is located in the southeastern portion of the South Coast Air Basin, which is under the jurisdiction of the South Coast Air Quality Management district.

The climate within the region, and for southern California in general, is classified as Mediterranean; characterized by wet winters and dry summers, with mild seasonal changes.

The region's weather patterns are influenced most by the Pacific Ocean and a semi-permanent high-pressure system. This high-pressure system deflects westerly storms to the north during the summer, but it moves south during the winter, allowing occasional storms and precipitation.

The prevailing wind direction for the region is from the west. However, the presence of the Pacific Ocean causes a diurnal wind pattern (wind blowing on shore during the day and off shore at night). There is a limited temperature variation throughout the year due to the moderating effect of the ocean.

Northeasterly Santa Ana winds occur when a high pressure system builds over the inland deserts and causes the hot, dry desert air mass to funnel westward through the mountains, into the South Coast Air Basin (SCAB).

Over the last 30 years, measurements at Long Beach show average annual high and low temperatures of 74 and 53 degrees Fahrenheit, respectively (SCAQMD, 1980).

Air Quality Standards

The federal government, through EPA has established primary and secondary National Ambient Air Quality Standards (NAAQS) under the provisions of the Clean Air Act. There are feral ambient air quality standards for ozone (03), carbon monoxide (CO)1, oxides of nitrogen (Nox), particulate matter of equal to or less than ten micrometers in diameter (PM10), oxides of sulfur (Sox), sulfates and lead (Pb). National primary air quality standards are established at the levels necessary, with an adequate margin of safety, to protect the public health welfare from any known or anticipated adverse effects associated with air contaminants. In states where these standards are exceeded, the EPA requires the preparation of air quality attainment plans for meeting the standards, with federal sanctions for those who fail to adequately plan for attainment.

In addition to the pollutant standards identified in NAAQA, the State of California has also established ambient air quality standards for the state. These are

known as the California Ambient Air Quality Standards (CAAQS). These standards are generally more stringent than the corresponding federal standards and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility reducing particles.

CEQA requires that in evaluating the significance of the environmental effect of a project, the lead agency shall consider both primary or direct and secondary or indirect consequences (CEQA Guidelines Section 15064(d). The impacts of a project need to be evaluated in terms of emission thresholds and other indicators of potential air quality impacts.

To determine whether a project generates sufficient quantities of air pollution to be considered significant, maximum thresholds have been established for mobile producers, i.e., cars, trucks, buses and trains, and stationary sources i.e., heating, air conditioning and energy consumption. Conformity Procedures (Rule 1306) requires that all government actions that generate emissions greater than the following thresholds are considered regionally significant.

Carbon Monoxide (CO)	550 lbs. per day
Sulfur Oxide (Sox)	150 lbs. per day
Nitrogen Oxides (Nox)	100 lbs. per day
Particulate (PM10)	150 lbs. per day
Reactive Organic Compounds (ROC)	75 lbs. per day

Also, to reduce mobile emissions the AQMD and Southern California Association of Governments have adopted Rules 1501, 1503, 1504, and 1505. Generally these rules require any employer of 100 or more employees to promote employee participation in vehicle trip reduction and ridesharing programs to reduce passenger automobile generated air pollution. These rules establish regulations, definitions, and procedures and exemptions.

CEQA states that an agency has the authority to approve projects with the potential to cause significant adverse environmental impacts (California Public Resource Code 21002 and State CEQA Guidelines 15092 and 15093). Thus, even if a project is found inconsistent with the AQMP and a net degradation of Basin air quality could occur, a local agency may approve a discretionary land use project or a government project that results in an inconsistency.

Air Quality Management Plan

The Air Quality Management District Plan establishes air pollution control strategies in an effort to set forth a comprehensive program to lead the South Coast Air Basin into compliance with all federal and California air quality standards. The Plan, hereby incorporated by reference, is available for review at SCAQMD offices located at 21965 E. Copley Drive, Diamond Bar, California, 91765-4182.

Consistency with the AQMP and PM10 means that a project is consistent with the goals, objectives, and assumptions in the respective plan to achieve the Federal and State air quality standards. Significant projects must be analyzed for consistency with the AQMP. There are two key indicators of consistency.

Whether the project will result in an increase in the frequency or severity of existing air quality violation or cause or contribute to new violations, or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP (except as provided for CO in Section 9.4 for relocating CO hot spots).

Whether the project will exceed the assumptions in the AQMP in 2010 or increments based on the year of project build-out phase.

In order to address the first criterion, the analysis will need to demonstrate that the project's emissions will not increase the frequency or the severity of existing violations, or contribute to a new violation at the project.

Consistency with the AQMP second assumption is determined by performing an analysis of the project with the assumptions in the AQMP for the year 2010.

AMBIENT AIR QUALITY STANDARDS

	CALIFORNIA		FEDERAL		
AIR POLLUTANT	CONCENTRATION	DISTRICT METHOD	PRIMARY (>)	SECONDARY (>)	METHOD [a)]
Ozone [b)]	0.09 ppm, 1-hr avg >	U.V. Photometry	0.12 ppm, 1-hr avg 0.08 ppm, 8-hour avg [b*)]	0.12 ppm, 1-hr avg 0.08 ppm, 8-hour avg [b)]	Chemiluminescence
Carbon Monoxide	9.0 ppm, 8-hr avg > [c)] 20 ppm, 1-hr avg >	Gas Correlation	9 ppm, 8-hr avg [d)] 35 ppm, 1-hr avg		Non-dispersive Infra-Red Spectrophotometry
Nitrogen Dioxide	0.25 ppm, 1-hr avg > [e)]	Gas Phase Chemiluminescence	0.053 ppm, annual avg [f)]	0.053 ppm, annual avg [f)]	Gas Phase Chemiluminescence
Sulfur Dioxide	0.04 ppm, 24-hr avg > [g)] 0.25 ppm, 1-hr avg > [h)]	Ultraviolet Pulse Fluorescence	0.03 ppm, annual avg 0.14 ppm, 24-hr avg	0.50 ppm, 3-hr avg	Para-rosaniline
Suspended Particulate Matter (PM10)	30 $\mu g/m^3$, annual geometric mean > 50 $\mu g/m^3$, 24-hr avg > [i)]	Size Segregation Inlet High Volume Sampling	50 $\mu g/m^3$, annual arithmetic mean 150 $\mu g/m^3$, 24-hr avg [j)]	50 $\mu g/m^3$, annual arithmetic mean 150 $\mu g/m^3$, 24-hr avg [j)]	Inertial Separation and Gravimetric Analysis
Suspended Particulate Matter (PM2.5) [k)]			15 $\mu g/m^3$, annual arithmetic mean [k*)] 65 $\mu g/m^3$, 24-hr avg [k**)]	15 $\mu g/m^3$, annual arithmetic mean [k*)] 65 $\mu g/m^3$, 24-hr avg [k**)]	Inertial Separation and Gravimetric Analysis
Sulfates	25 $\mu g/m^3$, 24-hr avg >=	High Vol. Sampling Ion Chromatography			
Lead	1.5 $\mu g/m^3$, 30-day avg >=	High Vol. Sampling Atomic Absorption	1.5 $\mu g/m^3$, calendar quarter	1.5 $\mu g/m^3$, calendar quarter	High Vol. Sampling Atomic Absorption
Hydrogen Sulfide	0.03 ppm, 1-hr avg >=	Cadmium Hydroxide Stractan			
Vinyl Chloride	0.010 ppm, 24-hr avg >=	Gas Chromatography			
Visibility Reducing Particles	In sufficient amount to give an extinction coefficient > 0.23 inverse kilometers (visual range less than 10 miles), with relative humidity <70%, 8-hour average (10am-6pm, PST) [l)].	Nephelometry and AISI Tape Sampler (COH)			

a) Reference method as described by the federal government. An equivalent method of measurement may be used as approved by the federal government.
b) Effective September 16, 1997, new federal 8-hour average standard was established.
b*) Based on the 3-year average of the annual fourth-highest maximum 8-hour average concentration at each monitoring site.
c) Effective December 15, 1982. The previous standards were 10 ppm, 12-hour average and 40 ppm, 1-hour average.
d) Effective September 13, 1985, standard changed from >10 $\mu g/m^3$ (>=9.3 ppm) to > 9 ppm (>=9.5 ppm).
e) Effective March 9, 1987, standard changed from >=0.25 ppm to > 0.25 ppm.
f) Effective July 1, 1985, standard changed from > 100 $\mu g/m^3$ (>0.0532 ppm) to > 0.053 ppm (>= 0.0535 ppm).
g) Effective July 29, 1992. The previous standard was >= 0.05 ppm, 24-hr avg with ozone >=0.1 ppm, 1-hr avg or TSP >=100 $\mu g/m^3$, 24-hr avg.
h) Effective October 5, 1984. The previous standard was 0.5 ppm, 1-hour average.
i) Effective August 19, 1983. The previous standards were 60 $\mu g/m^3$ TSP, annual geometric mean, and 100 $\mu g/m^3$ TSP, 24-hr average.
j) Effective July 1, 1987. The previous standards were :
Primary - annual geometric mean TSP > 75 $\mu g/m^3$, and 24 hour average TSP > 260 $\mu g/m^3$.
Secondary - annual geometric mean TSP > 60 $\mu g/m^3$, and 24-hour average TSP > 150 $\mu g/m^3$.
k) Effective September 16, 1997, new federal standards were established. There were no previous standards for PM2.5.
k*) Based on the 3-year average of annual atithmetic mean from all regular monitoring sites in the Basin.
k**) Based on the 3-year average of the 98th percentile concentrations at each monitoring site.
l) Effective October 18, 1989. The previous standard was "In sufficient amount to reduce the prevailing visibility to less than 10 miles at relative humidity less than 70%, 1 observation", and was based on human observation rather than instrumental measurement.

PTIM
May 1998

February 1998
Exceedances of Standards and Maximum Concentrations

Source/Receptor		Ozone					Carbon Monoxide				Nitrogen Dioxide		Sulfur Dioxide		
		Days Exceeding State Std	Days Exceeding Fed Std 1-hr	Days Exceeding Fed Std 8-hr	Max 1-hr ppm	Max 8-hr ppm	Days Exceeding State Std 8-hr/1-hr	Days Exceeding Fed Std 8-hr/1-hr	Max 8-hr ppm	Max 1-hr ppm	Days Exceeding State Std	Max 1-hr ppm	Days Exceeding State Std 24-hr/1-hr	Max 24-hr ppm	Max 1-hr ppm
LOS ANGELES COUNTY															
1 Central LA	087	0	0	0	0.04	0.039	0/0	0/0	2.88	5	0	0.07	0/0	0.001	0.00
2 Northwest Coastal LA County	091	0	0	0	0.04	0.036	0/0	0/0	2.13	3	0	0.05			
3 Southwest Coastal LA County	094	0	0	0	0.05	0.040	0/0	0/0	4.14	6	0	0.08	0/0	0.005	0.01
4 South Coastal LA County	072	0	0	0	0.04	0.036	0/0	0/0	4.00	6	0	0.06	0/0	0.005	0.01
6 West San Fernando Valley	074	0	0	0	0.05	0.050	0/0	0/0	2.86	5	0	0.05			
7 East San Fernando Valley	069	0	0	0	0.05	0.038	0/0	0/0	3.43	5	0	0.07	0/0	0.001	0.00
8 West San Gabriel Valley	088	0	0	0	0.04	0.039	0/0	0/0	2.63	4	0	0.07			
9 East San Gabriel Valley 1	060	0	0	0	0.05	0.044	0/0	0/0	1.43	3	0	0.07			
9 East San Gabriel Valley 2	591	0	0	0	0.05	0.043					0	0.07			
10 Pomona/Walnut Valley 1	075	0	0	0	0.04	0.030	0/0	0/0	5.13	8	0	0.07			
10 Pomona/Walnut Valley 2	108														
11 South San Gabriel Valley	085	0	0	0	0.05	0.040	0/0	0/0	3.00	5	0	0.07			
12 South Central LA County	084	0	0	0	0.04	0.029	0/0	0/0	4.50	8	0	0.07			
13 Santa Clarita Valley	089	0	0	0	0.05	0.050	0/0	0/0	2.14	5					
ORANGE COUNTY															
16 North Orange County	3177	0	0	0	0.04	0.036	0/0	0/0	4.00	8	0	0.06			
17 Central Orange County	3176	0	0	0	0.05	0.041	0/0	0/0	2.71	6	0	0.07			
18 North Coastal Orange County	3195	0	0	0	0.05	0.040	0/0	0/0	2.71	4	0	0.05	0/0	0.001	0.00
19 Saddleback Valley	3186	0	0	0	0.05	0.040	0/0	0/0	2.13	3					
RIVERSIDE COUNTY															
22 Norco/Corona	4155														
23 Metropolitan Riverside County 1	4144	0	0	0	0.05	0.045	0/0	0/0	2.14	4			0/0	0.010	0.01
23 Metropolitan Riverside County 2	4146						0/0	0/0	3.29	6					
24 Perris Valley	4149	0	0	0	0.04	0.036									
25 Lake Elsinore	4158	0	0	0	0.06	0.047					0	0.05			
29 Banning/San Gorgonio Pass	4150	0	0	0	0.05	0.041									
30 Coachella Valley 1**	4137	0	0	0	0.05	0.050	0/0	0/0	1.38	2	0	0.05			
30 Coachella Valley 2**	4157	0	0	0	0.05	0.045									
SAN BERNARDINO COUNTY															
32 Northwest San Bernardino Valley	5175	0	0	0	0.05	0.047					0	0.07			
33 Southwest San Bernardino Valley	5171														
34 Central San Bernardino Valley 1	5197	0	0	0	0.04	0.039					0	0.07	0/0	0.001	0.01
34 Central San Bernardino Valley 2	5203	0	0	0	0.05	0.043	0/0	0/0	2.71	3	0	0.06			
35 East San Bernardino Valley	5204	0	0	0	0.05	0.045									
37 Central San Bernardino Mountains	5181	0	0	0	0.05	0.043									
District maximum		0	0	0	0.06	0.050	0/0	0/0	5.13	8	0	0.08	0/0	0.010	0.01

** Salton Sea air basin

- continued
February 1998
Exceedances of Standards and Maximum Concentrations

Source/Receptor		PM10 No.(%)Days Exceeding State Standard	PM10 No.(%)Days Exceeding Federal Standard	PM10 Number Days Sampled	PM10 Max 24-hr Average	Lead*** No.Months Exceeding State Standard	Lead*** Number Days Sampled	Lead*** Monthly Average ug/m3	Sulfate No.(%)Days Exceeding State Standard	Sulfate Number Days Sampled	Sulfate Maximum 24-hr Average ug/m3
LOS ANGELES COUNTY											
1 Central LA	087	0(0%)	0(0%)	5	32	0	5	0.02	0(0%)	5	2.5
2 Northwest Coastal LA County	091								0(0%)	2	2.9
3 Southwest Coastal LA County	094	0(0%)	0(0%)	5	30	0	5	0.04	0(0%)	5	3.9
4 South Coastal LA County	072	0(0%)	0(0%)	5	36	0	5	0.07	0(0%)	5	5.0
6 West San Fernando Valley	074										
7 East San Fernando Valley	069	0(0%)	0(0%)	5	29						
8 West San Gabriel Valley	088								0(0%)	5	1.2
9 East San Gabriel Valley 1	060	0(0%)	0(0%)	5	34				0(0%)	5	2.1
9 East San Gabriel Valley 2	591										
10 Pomona/Walnut Valley 1	075										
10 Pomona/Walnut Valley 2	108										
11 South San Gabriel Valley	085					0	5	0.04	0(0%)	5	2.9
12 South Central LA County	084					0	5	0.04	0(0%)	5	3.2
13 Santa Clarita Valley	089	0(0%)	0(0%)	5	24						
ORANGE COUNTY											
16 North Orange County	3177										
17 Central Orange County	3176	0(0%)	0(0%)	5	41						
18 North Coastal Orange County	3195										
19 Saddleback Valley	3186	0(0%)	0(0%)	5	32						
RIVERSIDE COUNTY											
22 Norco/Corona	4155	0(0%)	0(0%)	5	42						
23 Metropolitan Riverside County 1	4144	2(20%)	0(0%)	10	59	0	3	0.03	0(0%)	3	4.3
23 Metropolitan Riverside County 2	4146					0	5	0.03	0(0%)	5	1.7
24 Perris Valley	4149	0(0%)	0(0%)	5	30						
25 Lake Elsinore	4158										
29 Banning/San Gorgonio Pass	4150	0(0%)	0(0%)	5	26						
30 Coachella Valley 1**	4137	0(0%)	0(0%)	5	16						
30 Coachella Valley 2**	4157	0(0%)	0(0%)	5	29						
SAN BERNARDINO COUNTY											
32 Northwest San Bernardino Valley	5175					0	5	0.03	0(0%)	5	2.6
33 Southwest San Bernardino Valley	5171	0(0%)	0(0%)	5	45						
34 Central San Bernardino Valley 1	5197	0(0%)	0(0%)	5	43				0(0%)	5	2.4
34 Central San Bernardino Valley 2	5203	0(0%)	0(0%)	5	31	0	5	0.02	0(0%)	5	1.8
35 East San Bernardino Valley	5204	0(0%)	0(0%)	5	29						
37 Central San Bernardino Mountains	5181	0(0%)	0(0%)	5	31						
District maximum		2	0		59	0		0.07	0		5.0

** Salton Sea air basin
***Special monitoring of lead near stationary sources was carried out in February 1998 and the maximum monthly average was 0.36 µg/m3.

January - February 1998
Year-to-Date Total Exceedances of Standards and Maximum Concentrations

Source/Receptor		Ozone					Carbon Monoxide				Nitrogen Dioxide		Sulfur Dioxide		
		Days Exceeding State Std	Days Exceeding Fed Std 1-hr	Days Exceeding Fed Std 8-hr	Max 1-hr ppm	Max 8-hr ppm	Days Exceeding State Std 8-hr/1-hr	Days Exceeding Fed Std 8-hr/1-hr	Max 8-hr ppm	Max 1-hr ppm	Days Exceeding State Std	Max 1-hr ppm	Days Exceeding State Std 24-hr/1-hr	Max 24-hr ppm	Max 1-hr ppm
LOS ANGELES COUNTY															
1 Central LA	087	0	0	0	0.04	0.039	0/0*	0/0*	5.38	7	0	0.13	0/0	0.009	0.13
2 Northwest Coastal LA County	091	0	0	0	0.05	0.036	0/0	0/0	2.88	4	0	0.08			
3 Southwest Coastal LA County	094	0	0	0	0.05	0.040	0/0*	0/0*	7.86	9	0	0.10	0/0	0.010	0.05
4 South Coastal LA County	072	0	0	0	0.04	0.036	0/0	0/0	6.14	8	0*	0.09	0/0	0.007	0.02
6 West San Fernando Valley	074	0	0	0	0.05	0.050	0/0	0/0	5.38	7	0	0.09			
7 East San Fernando Valley	069	0	0	0	0.05	0.038	0/0	0/0	6.71	8	0	0.10	0/0	0.002	0.01
8 West San Gabriel Valley	088	0	0	0	0.04	0.039	0/0	0/0	4.13	6	0	0.12			
9 East San Gabriel Valley 1	060	0	0	0	0.05	0.044	0/0	0/0	3.71	6	0	0.11			
9 East San Gabriel Valley 2	591	0	0	0	0.05	0.043					0	0.11			
10 Pomona/Walnut Valley 1	075	0	0	0	0.04	0.030	0/0*	0/0*	6.86	9	0	0.13			
10 Pomona/Walnut Valley 2	108														
11 South San Gabriel Valley	085	0	0	0	0.05	0.040	0/0	0/0	4.86	7	0	0.11			
12 South Central LA County	084	0	0	0	0.04	0.029	3/0	3/0	10.57	16	0	0.10			
13 Santa Clarita Valley	089	0	0	0	0.05	0.050	0/0	0/0	3.38	8					
ORANGE COUNTY															
16 North Orange County	3177	0	0	0	0.04	0.036	0/0	0/0	6.14	13	0	0.13			
17 Central Orange County	3176	0	0	0	0.05	0.041	0/0	0/0	4.00	6	0	0.10			
18 North Coastal Orange County	3195	0	0	0	0.07	0.049	0/0	0/0	4.50	6	0	0.07	0/0	0.008	0.01
19 Saddleback Valley	3186	0	0	0	0.05	0.040	0/0	0/0	2.71	6					
RIVERSIDE COUNTY															
22 Norco/Corona	4155														
23 Metropolitan Riverside County 1	4144	0	0	0	0.05	0.045	0/0	0/0	3.00	4	0	0.06	0/0	0.012	0.03
23 Metropolitan Riverside County 2	4146						0/0	0/0	4.57	6					
24 Perris Valley	4149	0	0	0	0.04	0.036									
25 Lake Elsinore	4158	0	0	0	0.06	0.047					0	0.08			
29 Banning/San Gorgonio Pass	4150	0	0	0	0.05	0.041									
30 Coachella Valley 1**	4137	0	0	0	0.05	0.050	0/0*	0/0*	1.38	2	0	0.05			
30 Coachella Valley 2**	4157	0	0	0	0.05	0.045									
SAN BERNARDINO COUNTY															
32 Northwest San Bernardino Valley	5175	0	0	0	0.05	0.047					0	0.11			
33 Southwest San Bernardino Valley	5171														
34 Central San Bernardino Valley 1	5197	0	0	0	0.04	0.040					0	0.10	0/0	0.001	0.01
34 Central San Bernardino Valley 2	5203	0	0	0	0.05	0.043	0/0	0/0	4.57	6	0	0.08			
35 East San Bernardino Valley	5204	0	0	0	0.05	0.045									
37 Central San Bernardino Mountains	5181	0	0	0	0.06	0.051									
District maximum		0	0	0	0.07	0.051	3/0	3/0	10.57	16	0	0.13	0/0	0.012	0.13

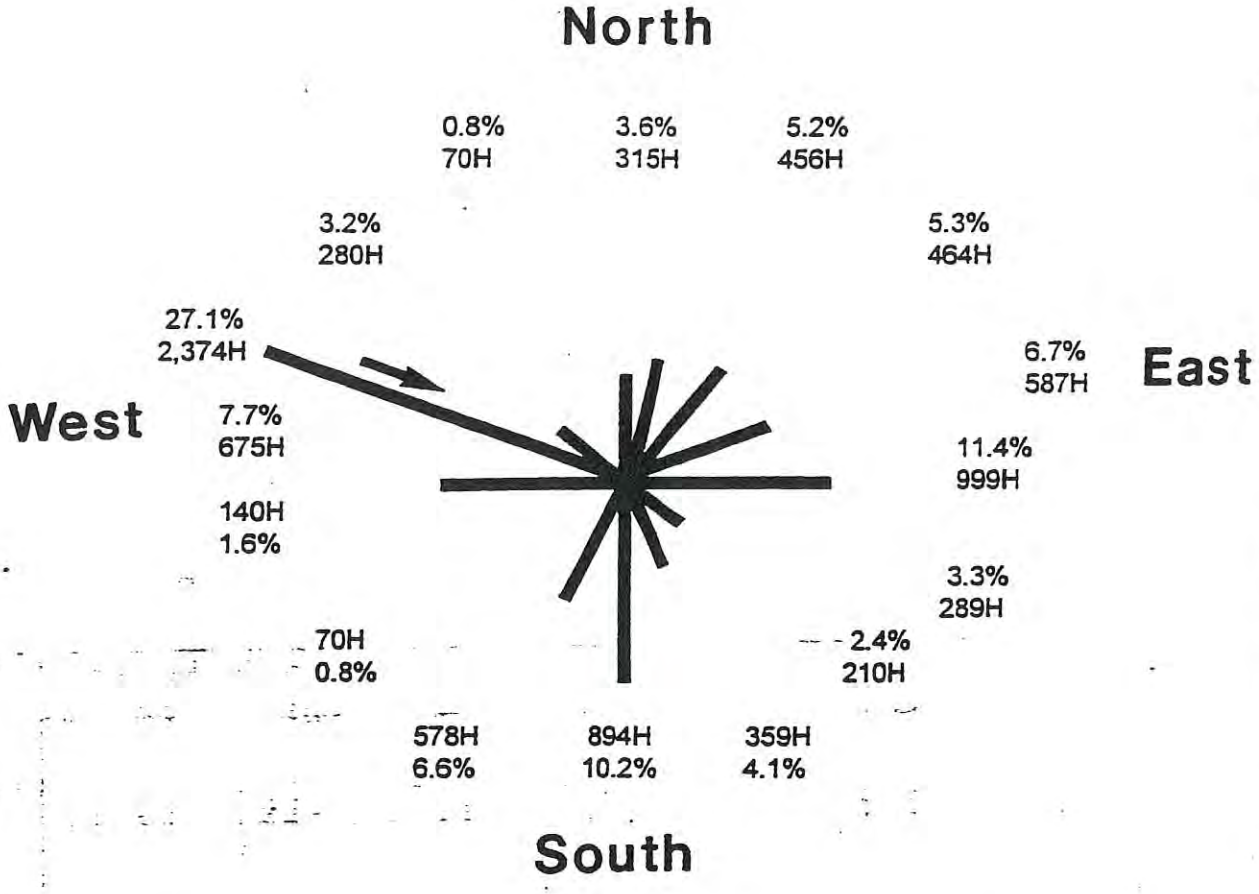
* = incomplete data
** Salton Sea air basin

January - February 1998
Year-to-Date Total Exceedances of Standards and Maximum Concentrations

Source/Receptor		PM10				Lead***			Sulfate		
		No.(%)Days Exceeding State Standard	No.(%)Days Exceeding Federal Standard	Number Days Sampled	Max 24-hr Average	No.Months Exceeding State Standard	Number Days Sampled	Maximum Monthly Average ug/m3	No.(%)Days Exceeding State Standard	Number Days Sampled	Maximum 24-hr Average ug/m3
LOS ANGELES COUNTY											
1 Central LA	087	1(10%)	0(0%)	10*	68	0	10*	0.03	0(0%)	10*	5.3
2 Northwest Coastal LA County	091								0(0%)	7*	5.6
3 Southwest Coastal LA County	094	1(11%)	0(0%)	9*	53	0	10*	0.06	0(0%)	10*	6.5
4 South Coastal LA County	072	1(10%)	0(0%)	10*	57	0	10*	0.07	0(0%)	10*	5.0
6 West San Fernando Valley	074										
7 East San Fernando Valley	069	1(10%)	0(0%)	10*	75						
8 West San Gabriel Valley	088										
9 East San Gabriel Valley 1	060	2(20%)	0(0%)	10*	57				0(0%)	10*	3.3
9 East San Gabriel Valley 2	591								0(0%)	8*	2.1
10 Pomona/Walnut Valley 1	075										
10 Pomona/Walnut Valley 2	108										
11 South San Gabriel Valley	085					0	10*	0.06			
12 South Central LA County	084					0	10*	0.04	0(0%)	10*	3.6
13 Santa Clarita Valley	089	0(0%)	0(0%)	10*	32				0(0%)	10*	5.1
ORANGE COUNTY											
16 North Orange County	3177										
17 Central Orange County	3176	2(20%)	0(0%)	10*	53						
18 North Coastal Orange County	3195										
19 Saddleback Valley	3186	0(0%)	0(0%)	5*	32						
RIVERSIDE COUNTY											
22 Norco/Corona	4155	3(30%)	0(0%)	10*	68						
23 Metropolitan Riverside County 1	4144	4(27%)	0(0%)	15	72	0	8*	0.05	0(0%)	8*	4.3
23 Metropolitan Riverside County 2	4146					0	10*	0.03	0(0%)	10*	1.8
24 Perris Valley	4149	1(10%)	0(0%)	10*	53						
25 Lake Elsinore	4158										
29 Banning/San Gorgonio Pass	4150	0(0%)	0(0%)	9*	27						
30 Coachella Valley 1**	4137	0(0%)	0(0%)	10*	30						
30 Coachella Valley 2**	4157	1(10%)	0(0%)	10*	56						
SAN BERNARDINO COUNTY											
32 Northwest San Bernardino Valley	5175					0	10*	0.05	0(0%)	10*	2.6
33 Southwest San Bernardino Valley	5171	1(10%)	0(0%)	10*	72						
34 Central San Bernardino Valley 1	5197	1(10%)	0(0%)	10*	60				0(0%)	10*	2.4
34 Central San Bernardino Valley 2	5203	0(0%)	0(0%)	9*	46	0	5*	0.02	0(0%)	10*	2.2
35 East San Bernardino Valley	5204	0(0%)	0(0%)	10*	40						
37 Central San Bernardino Mountains	5181	0(0%)	0(0%)	10*	31						
District maximum		4	0		75	0		0.07	0		6.5

* = incomplete data
** Salton Sea air basin
***Special monitoring of lead near stationary sources was carried out in 1998 and the maximum monthly average was 0.36 µg/m3.

Percent of Year - Number of Hours Per Year



→ Wind direction from 16 compass points (towards center of Wind Rose).

7.7% Percent of year (8,760 hours) wind originates from compass direction indicated.

28H Number of hours wind originated from compass point.

Methodology: Wind Rose diagram was obtained by averaging monthly data collected at 3640 Long Beach Boulevard, during 1971.

Prepared by: Community and Environmental Planning Division, Long Beach Department of Planning and Building.

Project Impacts:

CEQA requires that the proposed project impacts be evaluated for both short-term construction impacts and for project operational impacts. The CEQA Air Quality Handbook, produced by the South Coast Air Quality Management District (SCAQMD) provides "Screening Tables" for both construction and operational thresholds of significance. These tables provide a tool to quantify unmitigated air quality impacts associated with a proposed project.

Because the "SCAQMD Air Quality Handbook" evaluates air quality impacts according to land use, the potential air quality impacts of the Rancho Los Cerritos project will be analyzed according to land use designation. The project is approximately 13,882 square feet of "educational use". The "educational" land use category best reflects the nature of the overall activities offered at the proposed project site. This land use category will present a "worst-case scenario" for the intensity of uses for the proposed project expansion because some of the uses in the proposed project will likely generate less vehicle trips than those associated with the "educational" category in the 5th Edition ITE Manual projections. For example, additional office space and a new caretaker residence (proposed project) would not generate as many vehicle trips as an educational use designation.

Based on "Table 6-2. Screening Table for Operation – Daily thresholds of Potential Significance for Air Quality" a worst-case Educational Use would have significant air quality impacts if it was 150,000 square feet or larger.

Based on "Table 6-3. Screening Table for Construction – Quarterly Thresholds of Potential Significance for Air Quality" a project would have significant air quality impacts if it was 660,000 square feet or larger.

While the square footage of the proposed project is much less than the above project thresholds of significance, and as such will not create significant air quality impacts, this document will analyze and discuss the actual impacts anticipated during the construction phase of the proposed project, as well as the project operational impacts.

Construction Impacts:

During the first phase of the proposed project, emissions will be generated from site preparation, construction of new facilities, modification of existing facilities, demolition, and renovation. All asbestos has already been removed from the site. These construction activities are responsible for the emissions of ROC and Nox produced by vehicular traffic, asbestos emissions associated with demolition work, and PM10 in the form of fugitive dust raised by earth-moving equipment. Vehicular emissions will be disbursed by predominant winds into the air-shed.

The proposed project will cause short-term air quality impacts due to construction. Impacts will primarily occur as a result of fugitive dust and diesel emissions generated by heavy-duty construction vehicles during excavation, grading, and construction activities.

The demolition and construction air quality impacts will be temporary in nature but will likely be perceived as functionally significant.

The generation of dust is required to be controlled in conformance with South Coast Air Quality Management District Rule 403, which is anticipated to minimize dust impacts to other properties.

Table 4 estimates the total construction emissions that are expected from the proposed project. Estimations are based on a total time of construction of six months (120 working days). This assumption presents a worst-case scenario in terms of calculating construction emissions, because it assumes all the work of the 25-year Rancho Los Cerritos Master Plan would occur at once. In this scenario all of the emissions created by construction equipment, grading, construction workers fuel, etc. would occur over a short period of time, which means that the emissions would be much greater than are expected with a project construction that is phased over time.

TABLE 4
ESTIMATED TOTAL CONSTRUCTION EMISISONS
Construction Period 120 Working Days

Emissions Pounds Per Day

PROJECT EMISSIONS	ROC	Nox	CO	PM10
On-site emissions from equipment and worker's travel[1]	5.5	80.57	17.51	5.75
Daily SCAQMD Threshold Levels	75	100	550	150
Exceed Daily SCAQMD Levels	NO	NO	NO	NO

Neg: Neglible emissions, less than 0.5 lbs per day
CO: Carbon Monoxide, ROC: Reactive Organic Compounds, Nox: Nitrogen Oxides, PM10: Particulate matter, less than 10 microns

Includes vehicle trips, truck trips and heavy equipment operation (Cat 980, water

[1] Table 9-1, CEQA Air Quality Handbook, SCAQMD, Revised April 1993. Figures based on E=(((Project square footage/1,000) x (Table 9-1 emissions factor))/(Number of days to construct)). E=Daily construction emissions.

truck, sweeper) over a 3-day period. Reported 131 truckloads (262-trips) of demolition material removed from site. A 2-mile trip at 40 MPH average was used.

Estimated over 3-days with light equipment and one tractor cab.

Vehicle and truck trips and heavy equipment (sky loader, tractor, asphalt spreader, two rollers) will be used. Material deliveries include 12 trucks (24-trips) and 37 cement mixer trucks (74-trips) traveling 20-miles at 40 MPH.

Includes exporting 1959 cubic yards of soil, asphalt, and concrete.

Operational Impacts:

Motor vehicles are the primary source of emissions associated with residential, commercial, professional, institutional, and some industrial land uses. Trip generation is the mechanism used to measure the pollutants produced by motor vehicles going to and from the project site.

The traffic study produced by Linscott, Law and Greenspan Engineers estimates that trips generated by the implementation of the Master Plan will be 278 daily trips. Currently trips produced by the Rancho are 184 and will grow by 94 trips to a total of 278 trips at build-out.

Table 5 represents the increased amount of emissions based on an increase of 2-way vehicle trips of 94.

TABLE 5

	Vehicle Trips	Total Miles	CO	ROX	NOX	PM10
Trips	94	20	16	.92	2	---
SCAQMD Thresholds of Significance			550	55	55	150
Exceed Threshold			NO	NO	NO	NO

Emission calculations based on Table A9-5-6-6 of the SCAQMD Handbook, 1993.

It should be pointed out that the projected emissions represent the total generated emissions along the travel route and does not represent a concentration of emissions.

MITIGATION MEASURES:

Although no significant adverse impacts are anticipated, the following are required to reduce construction emissions the following mitigation measures are required:

1. Install dust containment screens along the western, northern and southern limits of construction.

2. Suspend use of all construction equipment operations during second stage smog alerts.
For daily forecast, call (800) 242-4022 (Los Angeles and Orange Counties).

3. Configure construction parking to minimize traffic interference.

4. Provide temporary traffic control during all phases of construction activities to improve traffic flow (e.g., flag person).

5. Schedule construction activities that affect traffic flow to off-peak hours (e.g., between 10:00 a.m. and 3:00 p.m.).

6. Providing dedicated turn lanes for movement of construction trucks and equipment on- and off-site.

7. Replace groundcover in disturbed areas as quickly as possible.

8. Enclose, cover, water twice daily, or apply non-toxic soil binders according to manufacturers' specifications, to exposed piles (i.e., gravel, sand, dirt) with 5% or greater silt content.

9. Water active sites at least twice daily.

10. Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph.

11. Monitor for particulate emissions according to District-specified procedures. For information, call (714) 396-3600.

12. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer) in accordance with the requirements of CVC Section 23114.

13. Sweep streets at the end of the day if visible soil material is carried onto adjacent public paved roads (recommend water sweepers with reclaimed water).

14. Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each rip.

Unavoidable Adverse Impacts:

It is anticipated that implementation of the mitigation measures will reduce impacts to a level of compliance for construction.

Cumulative Impacts:

Because the South Coast air basin is already adversely significantly impacted by air born pollutants, the project will cumulatively add to air pollution emissions in the air basin.

IV. BIOLOGICAL RESOURCES: Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service:

Existing Setting:

The proposed project is located in a residential neighborhood. However, it is also surrounded by the Virginia Country Club golf course. The biological habitat and species diversity is limited to that typically found in highly populated and urbanized Southern California settings.

The Avifaunal Survey of Long Beach (March 1974) characterizes the proposed project site as a residential area for the purpose of observing bird habitat. The Bixby Knolls neighborhood, which is adjacent to the Rancho, tends to alternate highs of population and species numbers during summer. Bixby Knolls exhibits somewhat denser vegetation, larger land parcels, and closer proximity to the Virginia Country Club, than other residential neighborhoods in Long Beach.

The type of construction and improvements to be made at the Rancho would not displace or remove mammals, plants, or reptiles. No historic trees will be removed. In locations disturbed by construction, a planting program should include native or naturalized groundcover for erosion control, with some informal tree placements.

A. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or Fish and Wildlife service.

During 1995 and 1996, the Audubon Society did monthly census counts of birds observed at the Rancho. In 2001 an activity chart was done (see Table XX). Many birds and species types are known to frequent the Rancho. Based on observation in 2001 the following birds are considered to be California Species of Special Concern.[2]

Species	Number	Activity
Coopers Hawk	1	Hunting Grounds
Sharp Shinned Hawk	1	Hunting Grounds
Yellow Warbler	2	Perching, Feeding

[2] Published list of Potentially Sensitive Species with Federal Status, State Status, and California Native Plant Society Listing

Less Than Significant Impact with Mitigation:

Construction: During grading and construction activities, existing shrubbery may be disturbed, which may affect feeding and/or potential nesting activities of all birds.

Operation of the proposed project: The new construction and improvements at the Rancho will not remove any open field environment at the site. The Master Plan calls for increased open space by removing part of the City added parking lot currently existing on the site. The proposed project will not significantly modify the habitat of birds observed at the Rancho, including the Coopers Hawk, the Sharp Shinned Hawk, or the Yellow Warbler.

MITIGATION MEASURES

If construction activity occurs during nesting season, a qualified ornithologist will locate active bird nests and construction activities shall be limited to areas where no nest destruction or damage can occur, or appropriate permits will be obtained from the U.S. Fish and Wildlife Service.

Unavoidable Adverse Impacts:

None are anticipated

Cumulative Impacts:

No impacts will occur.

- Summary of Potential Sensitive Species

Species	Habitat and Distribution	Activity/Blooming Period	Status Designation[1]		Probability of Occurrence[2]
SPECIES LISTED OR PROPOSED FOR LISTING					
BIRDS					
Willow flycatcher *Empidonax traillii*	Moist brushy areas; nests in western North America and winters in Middle America	Spring and fall	Fed.: State:	** CE	**Low.** May occur as a migrant only.
MAMMALS					
Pacific pocket mouse *Perognathus longimembris pacificus*	Sparsely vegetated areas on sandy soils in coastal Southern California	Summer	Fed.: State:	FE CSC	**Not expected.** Habitat appears unsuitable.
SPECIES NOT LISTED NOR PROPOSED FOR LISTING					
PLANTS					
Southern tarplant *Centromadia parryi* ssp. *australis*	Coastal Salt Marsh margins, vernally mesic Grasslands, Vernal Pools, often in ruderal, disturbed areas (ditches, road cuts, etc.).	Jun. - Nov.	Fed: State:	** ---	**Low.** Although conditions on site may be suitable, this conspicuous species was not observed on site.
Coulter's goldfields *Lasthenia glabrata*	Coastal Salt Marshes, Alkali Playas, Valley & Foothill Grasslands, and Vernal Pools below 3,000 ft. elev. Inland So. Calif. and along coast from San Luis Obispo Co. to Baja Calif.	Feb. - Jun.	Fed: State:	** ---	**Not expected.** Conditions appear unsuitable.
INSECTS					
Monarch *Danaus plexippus*	Widespread in North and South America	Year round	Fed.: State:	--- CSA	**Moderate.** Widespread.

Species	Habitat and Distribution	Activity/Blooming Period	Status Designation[1]		Probability of Occurrence[2]
REPTILES					
Coast horned lizard *Phrynosoma coronatum blainvillei*	Wide variety of habitats including coastal sage scrub, grassland, riparian woodland; typically on or near loose sandy soils; coastal and inland areas from Ventura Co. to Baja Calif.	Apr. - Jul. (with reduced activity Aug. - Oct.)	Fed.: State:	** CSC	**Not expected.** Habitat appears marginal.
BIRDS					
White-tailed kite *Elanus leucurus*	Open country in South America and southern North America	Year round	Fed.: State:	--- CSA	**Low.** Occasional visitors may forage on the site. Nesting sites unavailable.
Sharp-shinned hawk *Accipiter striatus*	Primarily forests and woodlands of the Americas	Winter	Fed.: State:	--- CSC	**Low.** Winter visitors may use the site on occasion.
Cooper's hawk *Accipiter cooperii*	Primarily forests and woodlands throughout North America	Primarily winter	Fed.: State:	--- CSC	**Low.** Occasional visitors may forage on the site. Nesting very unlikely.
Western burrowing owl *Speotyto cunicularia hypugaea*	Open country in western North America	Year round	Fed.: State:	** CSC	**Not expected.** Habitat appears marginal.
Loggerhead shrike *Lanius ludovicianus*	Open country in much of North America	Year round	Fed.: State:	--- CSC	**Low.** Occasional visitors may forage on the site. Nesting very unlikely.
California yellow warbler *Dendroica petechia brewsteri*	Riparian woodland while nesting in the western U.S. and northwestern Baja California; more widespread in brushy areas and woodlands during migration and winter, when occurring from western Mexico to northern South America	Migration	Fed.: State:	--- CSC	**Moderate.** Migrants may use the site on occasion. A yellow warbler observed on site may have been this subspecies or one of several other migratory subspecies in North America.
MAMMALS					
Yuma myotis *Myotis yumanensis*	Varied habitats in western North America	Warmer months	Fed.: State:	** ---	**Low.** Habitat appears marginal.
Long-legged myotis *Myotis volans*	Varied habitats in western North America	Warmer months	Fed.: State:	** ---	**Low.** Habitat appears marginal.
San Diego black-tailed jackrabbit *Lepus californicus bennettii*	Open country of coastal Southern California and northern Baja California	Year round	Fed.: State:	** CSC	**Low.** Reported on adjacent property, but the habitat on site appears unsuitable.

1. For a description of status designations, see Legend on following page.
2. Based on the following categories: **Not Expected; Low; Moderate; High; Observed.**

Legend: Status Designation

FEDERAL STATUS

FE	Federally listed as Endangered.
FT	Federally listed as Threatened.
PE	Federally proposed as Endangered.
PT	Federally proposed as Threatened.

Note: The U.S. Fish and Wildlife Service (USFWS) has recently revised its classification system for candidate taxa (species, subspecies, and other taxonomic designations), as described below.

C	Species formerly designated as "Category 1" (C1) candidate for federal listing are now known as "Candidate." Refers to taxa for which the U.S. Fish and Wildlife Service (USFWS) has sufficient information available to support a proposal to list as Endangered or Threatened. Issuance of the proposal(s) is anticipated, but precluded at this time.
**	Species formerly designated as "Category 2" (C2) candidate for federal listing; this designation has been discontinued by the USFWS. The USFWS will continue to assess the need for protection of these taxa and may, in the future, designate such taxa as Candidates.
C3a	Extinct species.
C3b	Former federal candidate for listing as Endangered or Threatened, but which is not believed by the Service to represent a distinct taxa meeting the Endangered Species Act's definition of a "species". Species taxonomically invalid.
C3c	Former federal candidate for listing as Endangered or Threatened, but which has been determined by the Service to be too widespread and/or not threatened at this time.

STATE STATUS

CE	State listed as Endangered.
CT	State listed as Threatened.
CR	State listed as Rare.
CFP	California Fully Protected. Species legally protected under special legislation enacted prior to the California Endangered Species Act.
CCE	State candidate for listing as Endangered.
CCT	State candidate for listing as Threatened.
CSC	California Species of Special Concern. These are taxa with populations declining seriously or otherwise highly vulnerable to human developments.

CALIFORNIA NATIVE PLANT SOCIETY LISTING

1A	List of plants that are presumed extinct in California.
1B	List of plants that are considered by the California Native Plant Society (CNPS) to be Rare, Threatened, or Endangered in California and elsewhere.
2	List of plants that are considered by CNPS to be Rare, Threatened, or Endangered in California, but more common elsewhere.
3	CNPS review list of plants suggested for consideration as Endangered but about which more information is needed.
4	CNPS watch list of plants of limited distribution, whose status should be monitored.

Sheet1

RANCHO LOS CERRITOS MONTHLY CENSUS											
	1995		1996								
species / date	10/14	12/30.	1/28.	2/25.	3/16	4/28	5/13	6/30.	8/24.	9/22.	
white tailed kite				1	2						
cooper's hawk			1								
sharp shinned hawk	1										
red tailed hawk		1									
red shouldered hawk			1	2	1		1	1			
spotted dove	2		2	4	5	5	3	5	5	4	
mourning dove					1	4	3	6	1	1	
anna's hummingbird	7	3	7	2			1	4	2	8	
allen's hummingbird	4	6	5	4	7	10	9	14	5	5	
black chinned hummingbird						1	1	1	2		
hummingbird sp.		1									
downy woodpecker				1	1	1		3		1	
No. flicker	1	2	2		5						
rough winged swallow	1				1		1	2	1		
cliff swallow								2			
barn swallow					2		3	1		9	
boreal pewee						1					
pacific slope flycatcher						1					
black phoebe	2	3	2	6	3	4	6	2	4	3	
scrub jay									2	2	
Am. crow			7	5	3	4	3		1		
bushtit	20	23	41	51	38	20	39	6	32	52	
white breasted nuthatch										1	
red breasted nuthatch										2	
house wren									1	1	
ruby crowned kinglet	1		3	1	1					1	
hermit thrush			2	1	1						
swainson's thrush							2				
thrush sp.						1					
Am. robin				1	14	7	11	2			
No mockingbird	6	4	2	4	4	2	5	2	4	3	
cedar waxwing		60	160	340	88						
european starling			3			4	2	2			
warbling vireo									1		
orange crowned warbler	4		2			1		6	5	7	
townsend's warbler	2		2		2					1	
hermit warbler						1					
black throated gray warbler	1		1		2	1					
yellow rumped warbler	11	5	35	66	27		1			1	
y. r. warb. (myrtle)			3	2							
yellow warbler										2	
Mc Gillvray's warbler										1	
wilson's warbler						1	2			1	
common yellowthroat	1										
black headed grosbeak						1	5	2		2	
western tanager	1		1	3	1	2	8		1	1	
Calif. towhee				1		1	2	1	1		

2001
4/7 ACTIVITY CHART

HUNTING GROUNDS
HUNTING GROUNDS

HUNTING GROUNDS
PERCHING FEEDING

PERCHING FEEDING

PERCHING FEEDING

PERCHING FEEDING

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FEEDING PERCHING

FEEDING PERCH

Sheet1

brown headed cowbird							1	2	2			
bullock's oriole							1	2	9	1	1	PERCHING, FEEDING
hooded oriole								2				PERCHING
house finch		10		30	2	24	9	7	25	7	8	PERCHING
Am. goldfinch		2				6		3	2	5	1	PERCHING
lesser goldfinch									1			
house sparrow		18				20	6	12	26	3	2	

GREAT HORNED OWL — PERCHING, FEEDING

V. CULTURAL RESOURCES. Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?

Section 15064.5 (a) (3) of the CEQA Guidelines states that "for the purposes of this section, the term "historical resources" shall include the following: Any object building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code SS5024.1, Title 14 CCR, Section 4852) including the following:

A. Is associated with events that have made a significant contribution to the broad patters of California' history and cultural heritage;
B. Is associated with the lives of persons important in our past;
C. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
D. Has yielded, or may be likely to yield, information important in prehistory or history."

Rancho Los Cerritos is listed on the National Register of Historic Place and is a State and local Long Beach Landmark. In addition, the site is a critical component in the development of Long Beach and Southern California. The physical site and existing structures as well as the Rancho's developmental history are "historically significant" as defined by CEQA.

Existing Setting:

The site has evolved over the centuries from a Native American Village to a working ranch, which was transferred from Spanish to Mexican to American hands. Following is a summary of historically significant characteristics at the site, as they exist today:

1) The Ranch House: a two-story central adobe structure two 1-story wings enclosed by a gated wall to form an "inner courtyard". The building is in good repair, but does not meet current seismic code requirements. However, the Rancho is currently undergoing seismic retrofit, expected to be completed by Summer 2002.

Currently the Ranch House functions as staff offices, the caretaker's residence,

exhibit space, visitor's center, library, and storage/archive space.

2) Gardens/ Landscape: In 1930 Llewellyn Bixby Sr. hired well-known landscape architect Ralph D. Cornell to create a garden plan for Rancho Los Cerritos. The plan incorporated native plants and preserved the trees and plants surviving from John Temple's formal garden. Currently remaining on the site from Temple's garden are an Osage orange, three pomegranates, two citrus, two olive and three Italian cypress trees. Also remaining on the site, from the Bixby era, are several black locust trees and a large Moreton Bay Fig.

Anticipated Impacts:

§ 15064.5 (b) (3) states that "Generally a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings or the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995), Weeks and Grimmer, shall be considered as mitigated to a level of less than a significant impact on the historic resource."

The Rancho Los Cerritos Master Plan was created to guide future site development and interpretation at the Rancho over the next 25 years. Because the Rancho is an important historic resource for our City and region, the Rancho Los Cerritos Foundation contracted with a consultant team to prepare a comprehensive master plan for the site. The following physical changes are specified to meet future visitor, staff, security, and collections needs in the context of protecting existing historic resources.

1) Rehabilitation and seismic upgrade of the Ranch House to the 1930s era*
2) A new Visitor Center - Reconstruction of the Cota adobe using stabilized adobe bricks**
3) A newly constructed Rancho Entrance and Driveway
4) Restore the inner courtyard to its 1930s condition***
5) Restore back gardens
6) Reconstruction (new construction) of the original barn facility
7) Reconstruction of the barnyard area
8) Restore orchard and Ranch house landscape
9) New construction of a caretakers residence
10) Removal of the existing public restroom facility and replacement with public restrooms throughout the site (accessible for persons with disabilities, visually unobtrusive and compatibly designed to match the architectural style of the site)
11) Preservation of the arroyo
12) Installation of a California native garden
13) Installation of perimeter landscape trees and shrubs

* Rehabilitation – Is defined as the act or process of returning a property to a state of utility through repair or alteration which makes possible an efficient contemporary use while preserving those portions or features of the property which are significant to its historical, architectural, and cultural values.

** Reconstruction – Is defined as the act of process of reproducing by new construction the exact form and detail of a vanished building, structure, or object, or a part thereof, as it appeared at a specific period of time.

*** Restoration – Is defined as the act or process of accurately recovering the form and details of a property and its setting as it appeared at a particular period of time by means of the removal of later work or by the replacement of missing earlier work.

The proposed project is required to conform to the U.S. Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings. The proposal must obtain a Certificate of Appropriateness from the Long Beach Cultural Heritage Commission. The Cultural Heritage Commission must evaluate the proposal as it conforms to the Secretary's Guidelines.

The Rancho Los Cerritos Master Plan states that one of the goals of the plan is to 1) conserve those areas and characteristics of the ranch site that remain intact from the historic time period, and (2) restoring and maintaining the remainder of the site to reflect the general image and character of those periods of time. In addition, the Long Beach Neighborhood Preservation office has reviewed the proposal and states in part:

"All of the proposed changes in the Master Plan are beneficial to the historic integrity and significance of the site. There are no adverse environmental impacts on cultural resources resulting from the Master Plan. The Cultural Heritage Commission has already been informed and consulted about the plan, and will continue to be involved in every step of plan development and implementation. Architectural and construction plans for all work on the site will be required to have Certificate of Appropriateness review, giving the Commission the oversight responsibility for maintaining historic integrity during every phase of implementation."

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?

Section 15064.5 (c) (1) of the CEQA Guidelines states that, "When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource, as defined in subsection (a). Section 15064.5 (c) (2) of the CEQA Guidelines states that, "If a lead agency determines that the archaeological site is an historical resource, it shall refer to the provisions of

Section 21084.1 of the Public Resources Code, and this section, Section 15126.4 of the Guidelines, and the limits contained in Section 21083.2 of the Public Resources Code do not apply.

Existing Conditions:

Rancho Los Cerritos is an historical resource as defined by subsection (a) and the site has been registered as site LAN-696 for both possible historic archaeological associations and evidence of a site component dating back to the period 5,000 to 2,000 BC.

Formal digs have taken place at Rancho Los Cerritos in 1987 (see Appendix X) as part of the Historic Structure Report, and in 1997 as part of the west wall reconstruction. The first dig was by Greenwood & Associates; RMW conducted the second dig. Other informal archaeological digs have been conducted on Rancho Los Cerritos grounds since the late 1950s. Two areas have been mapped as especially rich in historical archaeological materials. The area west of the ranch house, under the planted island, contains a circa 1850s trash pit. The area by the incinerator, north of the kitchen area, is rich in materials from the 1870s. Both areas will be disturbed by master plan construction.

Anticipated Impacts:

Implementation of the Rancho Los Cerritos Master Plan will require ground disturbance at the site. Pursuant to the development of the Master Plan, the State Historic Preservation Office (SHPO) was contacted regarding review of the proposed construction at the site. The SHPO supported the overall Master Plan and for the record, it was noted that Rancho staff should professionally excavate the area to ascertain if there is evidence of remaining foundations prior to the reconstruction of the new barn complex. In addition, at the time of construction, a professional archaeology firm with an historic archaeology emphasis should be hired to investigate the construction sites for both the Visitor Center and the barn complex, and to monitor excavation for footings and basements.

Section 15064.5 (c) (2) of the CEQA Guidelines states that , "If a lead agency determines that the archaeological site is an historical resource, it shall refer to the provisions of Section 21084.1 of the Public Resources Code, and this section, Section 15126.4 of the Guidelines, and the limits contained in Section 21083.2 of the Public Resources Code do not apply.

It has been determined that "preservation in place" as a mitigation to possible disturbance of archaeological artifacts is not feasible because it would not allow for the reconstruction of the barn complex, the Visitor's Center, and construction of the Caretaker's Residence. As such, Section 15126.4 (C) of the CEQA Guidelines states that "When data recovery through excavation is the only feasible mitigation, a data recovery plan, which makes provision for adequately

recovering the scientifically consequential information from and about the historical resource, shall be prepared and adopted prior to any excavation being undertaken. Such studies shall be deposited with the California Historical Resources Regional Information Center. Archaeological sites known to contain human remains shall be treated in accordance with the provisions of Section 7050.5 Health and Safety Code."

In addition to the above stated requirements of the CEQA Guidelines, any restoration, rehabilitation or reconstruction work at the site must adhere to the Secretary of the Interior's Standards for Historic Preservation projects. The standards include the following recommendations regarding archaeological sites and features:

1) Retain archaeological resources intact, whenever possible
2) Minimize disturbance of terrain around the property, thus reducing the possibility of destroying unknown archaeological resources
3) Undertake archaeological investigations in accordance with The Recovery of Scientific, Prehistoric, and Archaeological Data: Methods, Standards, and Reporting Requirements

Rancho Los Cerritos staff are sensitive to the historical value of the archaeological artifacts that have been found on the site and to the value of archaeological material that may be unearthed during the implementation of the Master Plan. Currently, any work that requires disturbance of the earth at the site is closely monitored by Rancho staff and thoroughly documented. With the appropriate mitigation measures in place, archaeological artifacts unearthed at the site will not be significantly impacted.

(c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature:

Existing Conditions:

The site is not known or suspected to contain any unique paleontological resource.

Anticipated Impacts:

None are expected. However, should any unique paleontological resource be discovered during excavation, mitigation number 5 addresses preservation of this resource type.

(d) Disturb any human remains, including those interred outside of formal cemeteries.

Existing Conditions:

No human remains have been discovered at the site in previous excavations. It is not suspected that the site was ever a burial ground for any Native American Indians or for any former inhabitants of the Rancho.

Anticipated Impacts:

None are expected. However, should any be discovered the mitigation measures will insure that the remains are catalogued according to scientific archeological methods. In addition, if during excavation, any human remains are detected, they shall be treated in accordance with the provisions of Section 7050.5 Health and Safety Code

Mitigation Measures:

1. The project is required to conform to the U.S. Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings.

2. The project must conform to the Standards of Rehabilitation measures adopted by the July 1999 Rancho Los Cerritos Master Plan. (See Appendix A)

3. The project must receive a Certificate of Appropriateness from the Long Beach Cultural Heritage Commission.

4. A data recovery plan, which makes provision for adequately recovering the scientifically consequential information from and about the historical resource, shall be prepared and adopted prior to any excavation being undertaken

5. The applicant shall select an archaeologist to monitor all project grading and excavation activities, to conduct test excavations (if appropriate) and to conduct salvage excavations if necessary. A Native American monitor, selected by the applicant, shall also monitor the above-described activities during the development of the proposed project.

5. During all subsurface grading/excavation, archaeological monitoring shall be required. A physical inspection of any and all suspected archaeological deposits will be made by the project archaeologist and Native American monitor prior to their removal through grading, or, alternatively, their further mitigation through scientific archaeological methods such as described below:

6. If archaeological sites, features or artifacts are encountered by the project Archaeologist and Native American monitor, they shall be formally recorded by the project archaeologist. Such recording will involve measuring, mapping,

and photography and description, which can be made on the basis of visual inspection.

7. If potentially unique resources are suspected as a result of the monitoring program described above, the project archaeologist shall conduct a subsurface test excavation program in order to determine the presence or absence of such resources on the project site, and to reduce the likelihood of destruction of any significant archaeological resources. An archaeological test excavation should determine the level of significance of any remaining archaeological deposits, their vertical depth and horizontal extent, and provide an estimate of archaeological site volume necessary for the determination of an adequate salvage sample, should such be required.

8. If the archaeological test excavations described above reveal archaeological resources (sites, features, or artifacts) deemed unique (as defined by the provisions of California Public Resources Code Section 21083.2(g) by the project archaeological and native American monitor, those resources to be disturbed shall be addressed through scientific archaeological salvage excavations subject to the provisions and limitations of California Public Resources Code Section 21083 (c), (d), and (e)(1). Any salvage excavation shall be conducted pursuant to an excavation plan prepared in accordance with Appendix K to the State CEQA Guidelines Archaeological salvage excavations normally involve the complete excavation of any intact features (burials, caches, etc) which might be encountered, plus the scientific excavation of a predetermined salvage sample. This sample will be a percentage of the total archaeological site volume already estimated from the producing archaeological test program. The timing of all scientific archaeological excavations shall be determined by the applicant in consultation with the project archaeological and Native American monitor, taking into account the applicant's construction schedule.

9. If human burials or human remains are encountered through any of the above activities, all work shall cease in the immediate area until it can be determined whether or not such remains are those of native American Indians. If this proves to be the case, notification shall be given in accordance with all applicable laws, including California Public Resources Code Section 5097.98 and Appendix K to the State CEQA Guidelines.

10. All historic object(s) to be removed shall be documented with black and white archival photographs showing all views plus significant construction detail, keyed to the site. This documentation shall include large format photography and measured drawings. The photographs and plans prepared as mitigation shall be submitted to the City of Long Beach Planning and Building Department for inclusion in their architectural and cultural resources surveys, with copies to the Rancho's permanent archives.

Unavoidable Adverse Impacts:

None are anticipated.

Cumulative Impacts:

None are anticipated.

VI. GEOLOGY AND SOILS

Existing Setting:

The primary structure located at the proposed site is constructed of thick adobe block. The Rancho is currently in the process of performing a complete seismic retrofitting of the Ranch House. The retrofitting project will be complete before any construction begins on the proposed project.

Anticipated Impacts:

Would the project:

Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a know fault?
ii) Strong seismic ground shaking?
iii) Seismic-related ground failure, including liquefaction?
iv) Landslides?

The subject site is located near the fault zone for the Newport – Inglewood fault lines, however, it is not located within the Alquist-Priolo Special Study Zone.[3] The soil at the site is characterized as deep-stiff soil condition north of the Newport-Inglewood faults. Liquefaction potential at the subject site is minimal.[4] Although the Rancho is slightly elevated, the slope is less than a 2:1 ratio and will not cause a significant impact for landslides.

MITIGATION MEASURE

Development and construction of the project shall conform to the seismic design provisions of the current Uniform Building Code.

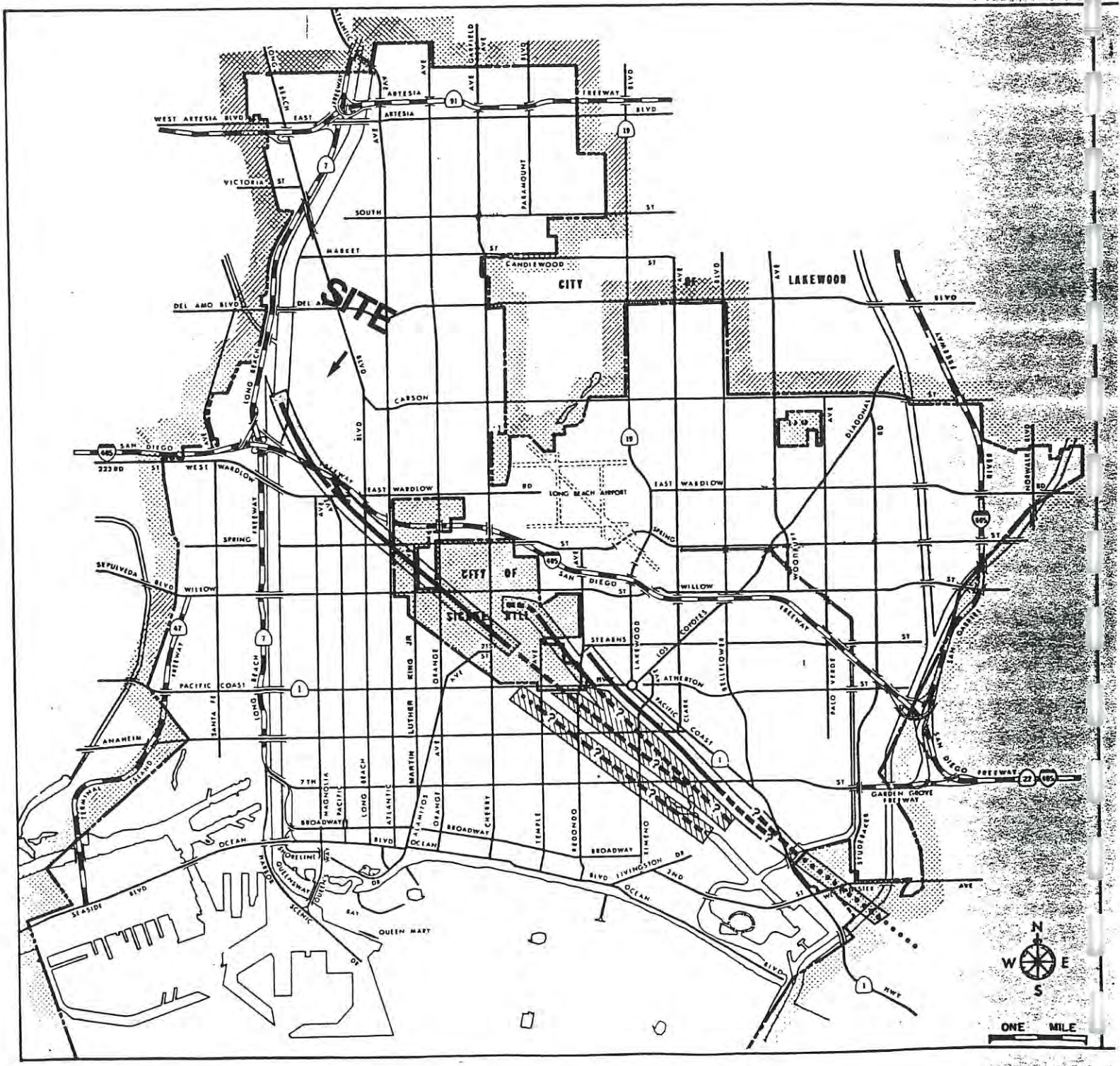
Unavoidable Adverse Impacts:

None are anticipated.

Cumulative Impacts:

None are anticipated.

[3] Based on the City of Long Beach, General Plan Seismic Safety Element. 1988.
[4] *Ibid.*


SITE
CITY OF LAKEWOOD
LONG BEACH AIRPORT
CITY OF SIGNAL HILL
WEST ARTESIA BLVD
ARTESIA FREEWAY
VICTORIA ST
SOUTH ST
MARKET ST
DEL AMO BLVD
CARSON ST
EAST WARDLOW RD
WEST WARDLOW
SPRING ST
WILLOW ST
SEPULVEDA BLVD
PACIFIC COAST HWY
ANAHEIM ST
7TH ST
BROADWAY
OCEAN BLVD
SEASIDE BLVD
QUEEN MARY
SAN DIEGO FREEWAY
GARDEN GROVE FREEWAY
ATHERTON ST
STEARNS ST
N
W
E
S
ONE MILE

VII. HAZARDS AND HAZARDOUS MATERIALS

Existing Setting:

The Rancho is essentially in the same condition that is was when the Ranch House was originally constructed and subsequently added on to in the 1930s. The only other structure at the site is a public restroom facility installed by the City. The site is not suspected to be contaminated.

Anticipated Impacts:

There are no underground fuel storage tanks at the site and no oil extraction has ever been done on the site.

Lead paint has been identified and is currently being abated during the seismic retrofitting of the Ranch House. (Abatement Plan attached as Appendix B)

Unavoidable Adverse Impacts:

None are anticipated.

Cumulative Impacts:

None are anticipated since this is an isolated project.

VIII. HYDROLOGY

Existing Setting:

The proposed site is slightly higher in elevation that the surrounding uses. The construction of the Visitor's Center and the Barn facility is not expect to significantly affect existing drainage patterns. Both sites currently have adequate drainage and the construction of these structures will actually reduce drainage patterns at the site.

The proposed project is not within the flood hazard zone. It is located in Zone X, which is determined to be outside the 500-year flood plain.[5]

The Rancho is currently covered with approximately 25% impermeable surfaces. The proposed project will add approximately 4560 square feet of impermeable surface, however, because most of the City added parking lot will be replaced with decomposed granite, there will be no net gain of impermeable surface at the site.

The project must comply with the National Pollution Discharge Elimination System (NPDES) law, which is designed to prevent contaminated water from entering the ground water, including rivers, lakes, estuaries, days and oceans.

To determine a "worst case" scenario of potential rainfall to be captured, NPDES, assumes that ¾ of an inch of rain will fall in 5 minutes. Under this scenario, the project will be required to capture that 402 gallons per minute of runoff before it is in compliance with the required NPDES Permit.

Anticipated Impacts:

Should grading take place in the rainy season, soil erosion is possible. To protect the surrounding properties and the potential run off into the storm drains, the project must prepare a full grading and drainage plan, according to the National Pollution Discharge Elimination System.

Mitigation Measures:

Applicant shall submit an erosion protection plan to the Director of Planning and Building.

Virginia Road shall be kept "broom clean" during construction.

A complete grading and drainage plan shall be submitted to the Long Beach Director of Public Works and the Los Angeles County Public Works Department.

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[5] Community Panel #0601360010, Sept. 1, 2000 FIRM, Flood Rate Map

Applicant shall obtain a National Pollution Discharge Elimination System permit prior to the release of building permits.

Unavoidable Adverse Impacts:

None are anticipated.

Cumulative Impacts:

None are anticipated since this is an isolated project.

IX. LAND USE AND PLANNING

Existing Setting:

The Rancho provides an interpretive learning experience. The Rancho has remained as it was built with an emphasis on vast garden area and open space. The Rancho is open to all citizens and is a place for learning about our collective past and experiencing a much less urban time in our recent past.

The Long Beach General Plan designates the Rancho as Land Use District 11, Open Space and Parks. The site is zoned Institutional.

The General Plan states that land uses in LUD 11 "should serve the overall purpose of promoting mental and physical health of the urban citizenry..." and should be "...distributed so that all citizens, regardless of race, age, handicapped condition, sex or socio-economic class, have access to the opportunity for the enhancement of health through contact with such natural environments."

Table 6 is a list of uses, which are permitted in the Institutional zone. Permitted building heights for the principal structures are 30' and 15' for accessory structures. Permitted side and rear yards are 15'.

Since the proposal is on city property, Site Plan Review is required. The purpose, as set forth in Section 21.25.501 of the Zoning Ordinance is as follows:

The site plan review process is established to meet certain community goals which are among others, to ensure that the highest quality of land planning and design are incorporated into development projects, to ensure that new projects are compatible with existing neighborhoods terms of scale, style and construction materials, and to ensure the maintenance, restoration, enhancement and protection of the environment.

The applicable findings required for Site Plan review are as follows:

1. The design is harmonious, consistent and complete within itself and is compatible in design, character and scale, with neighboring structures and the community in which it is located;

2. The design conforms to any applicable special design guidelines or specific plan requirements, such as the Design Guidelines for R-3 and R-4 Multi-family Development, the Downtown Design Guidelines, PD Guidelines or the General Plan;

3. The design will not remove significant mature trees or street trees, unless no alternative design is possible.

With regard to parking (see Transportation) the site enjoys legal non-conforming status i.e. the facility was constructed under previous parking codes and does not conform to the current regulations. A Standards Variance is necessary to reduce the existing number of parking spaces from 34 parking spaces to 24 parking spaces. The purpose of Standard Variances is as set forth in Section 21.25.301 is as follows:

"The city recognizes that certain properties, due to their unique size, shape, location or other physical condition, cannot be developed in strict accord with the regulations of this title. Therefore, this division establishes guidelines and procedures for the granting of relief from certain provisions in specific situations."

21.25.301 Required Findings.

The following findings must be analyzed, made and adopted before any action is taken to approve or deny the subject standards variance and must be incorporated into the record of proceedings relating to such approval or denial:

1. The site or the improvements on the site are physically unique when compared to other sites in the same zone;
2. The unique situation causes the applicant to experience hardship that deprives the applicant of a substantial right to use of the property as other properties in the same zone are used and will not constitute a grant of special privilege inconsistent with limitations imposed on similarly zoned properties or inconsistent with the purpose of the zoning regulations; and
3. The variance will not cause substantial adverse effects upon the community.

Rancho Los Cerritos is owned by the City and open to the general public. The facility is accessed by a public street, Virginia Road, which also provides access to the Virginia Country Club and the adjacent residential neighborhood. Anticipated Impacts:

The proposal does not represent a new use or activity, rather the project accommodates existing programs. The use is permitted outright by both Zoning and the General Plan. The proposal meets the setbacks required and design standards. The proposed height is within that permitted in zoning. The new Barn facility is considered to be a primary use because it houses functions that are necessary to the operations of the Rancho. The height of the Barn is 28 feet at the mid-point of the roof line. The Zoning Ordinance allows 30 feet. The Visitor's Center and the Caretaker Residence are considered accessory uses and are 15 feet in height, as allowed by the Zoning Ordinance.

The proposed Barn Facility and Visitor's Center will provide for year-round educational, public and administrative support.

The administrative and educational facilities are permitted uses by the Zoning Code

Since the Rancho is in an established residential area, construction has a significant potential to impact the residential neighborhood with construction equipment and materials.

Mitigation Measures:

All construction equipment and materials shall be stored on-site.

All construction workers shall park their vehicles on-site.

Unavoidable Adverse Impacts:

None are anticipated with the implementation of the mitigation measures.

Cumulative Impacts:

None are anticipated since this is an isolated and final project.

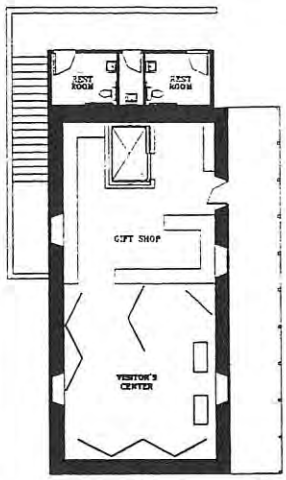
Uses in the Institutional District

Use	District I
1. Arboretum, botanical gardens or nurseries	Y
2. Cafeterias and restaurants	A
3. Caretaker's residence	AP
4. Carnival, fiesta, or similar exhibition or celebration	T
5. Cellular and personal communication services	
a. Freestanding/monopole (see Section 21.52.210)	C
b. Attached/roof mounted equipment (see Section 21.45.115)	Y
6. Cemeteries	C
7. Churches	Y
8. Colleges, universities and vocational training centers	Y
9. Commercial uses (as principal use)	N
10. Construction trailer	T
11. Convention and exhibition centers	Y
12. Country clubs (with golf course)	Y
13. Cultural centers	Y
14. Day care/preschool	Y
15. Fire stations	Y
16. Governmental offices	Y
17. Hall rental	C
18. Handicapped and senior citizen housing	C
19. Historical landmarks, memorials and monuments	Y
20. Hospitals, medical centers, medical office complexes, convalescent hospitals	Y
21. Interim storage of vehicles and service yard (two years)	C
22. Libraries	Y
23. Manufacturing	N
24. Marinas	Y
25. Off-premises signs	N
26. Museums	Y
27. Parking (commercial)	C
28. Parking (courtesy)	A
29. Pistol or rifle range	C
30. Police station	Y
31. Police training academy	C
32. Recreational facility	A
33. Residential — single-family	Y
34. Residential — multiple-family	N
35. Sale of alcoholic beverage	C
36. Schools (public or private, excluding vocational schools)	Y
37. Schools—vocational	N
38. Social service office of non-profit organizations	Y
39. Special group residence (communal, board and care, etc.)	C
40. Stadium	C
41. Trailer used for office or nightwatchman's quarters	T
42. Water tanks	Y

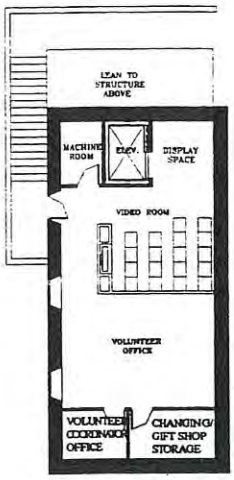
Abbreviations:
Y = Permitted.
N = Not permitted.
C = Conditional use permit required. Refer to Chapter 21.52.
A = Permitted as an accessory use. Special conditions may apply. Refer to Chapter 21.51.
T = Permitted as a temporary use subject to the requirements of Chapter 21.53 of this title.
AP = Permitted with an administrative use permit.

Table 6

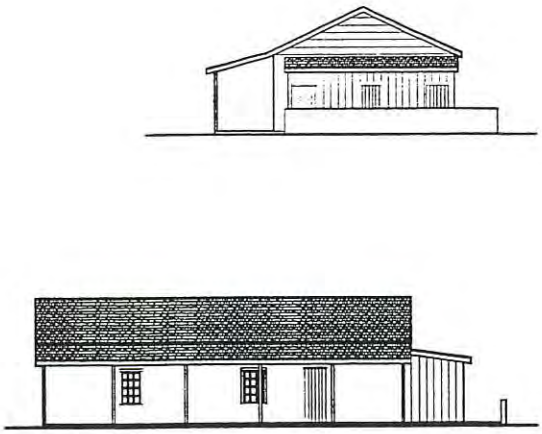
Section 4 - Master Plan Recommendations



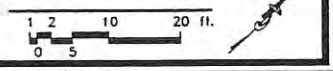
Ground Floor
966 SF

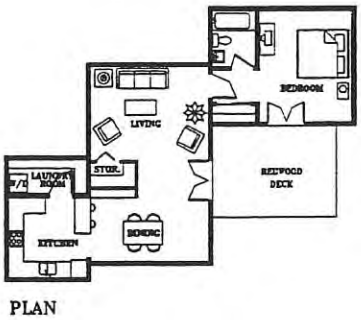


Lower Level
966 SF

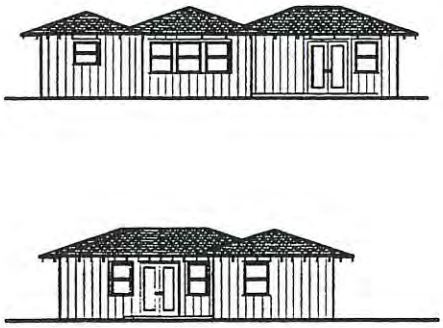


Proposed Visitor Center (Cota adobe).
The Visitor Center measures 50 feet x 25 feet with usable space on each floor of 966 SF for a total of 1932 SF. The restrooms add another 190 SF.

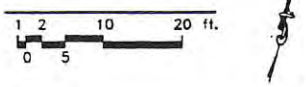




PLAN

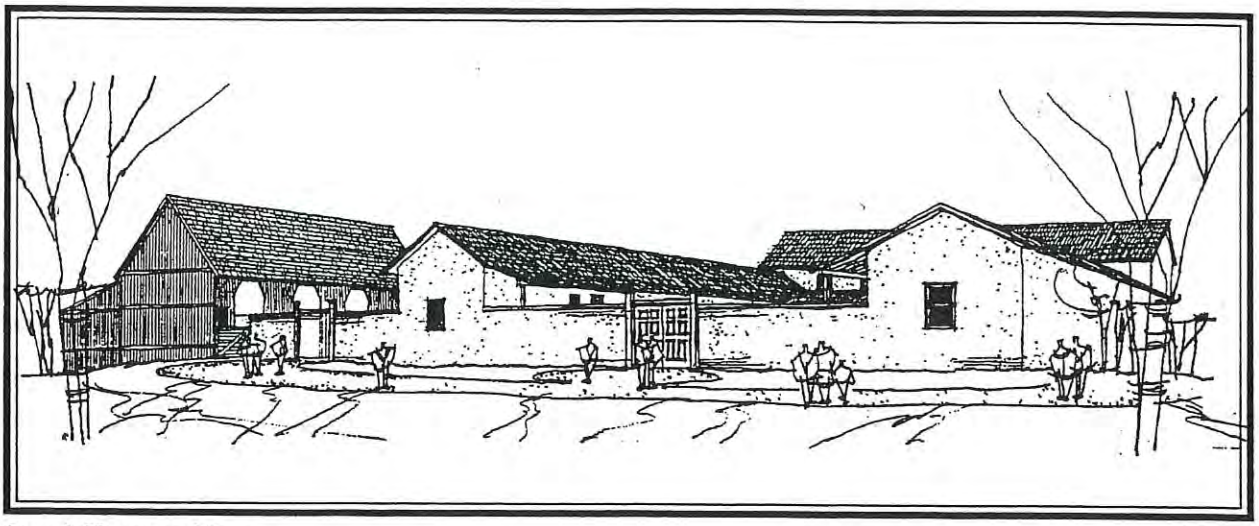


The usable space is 800 SF.

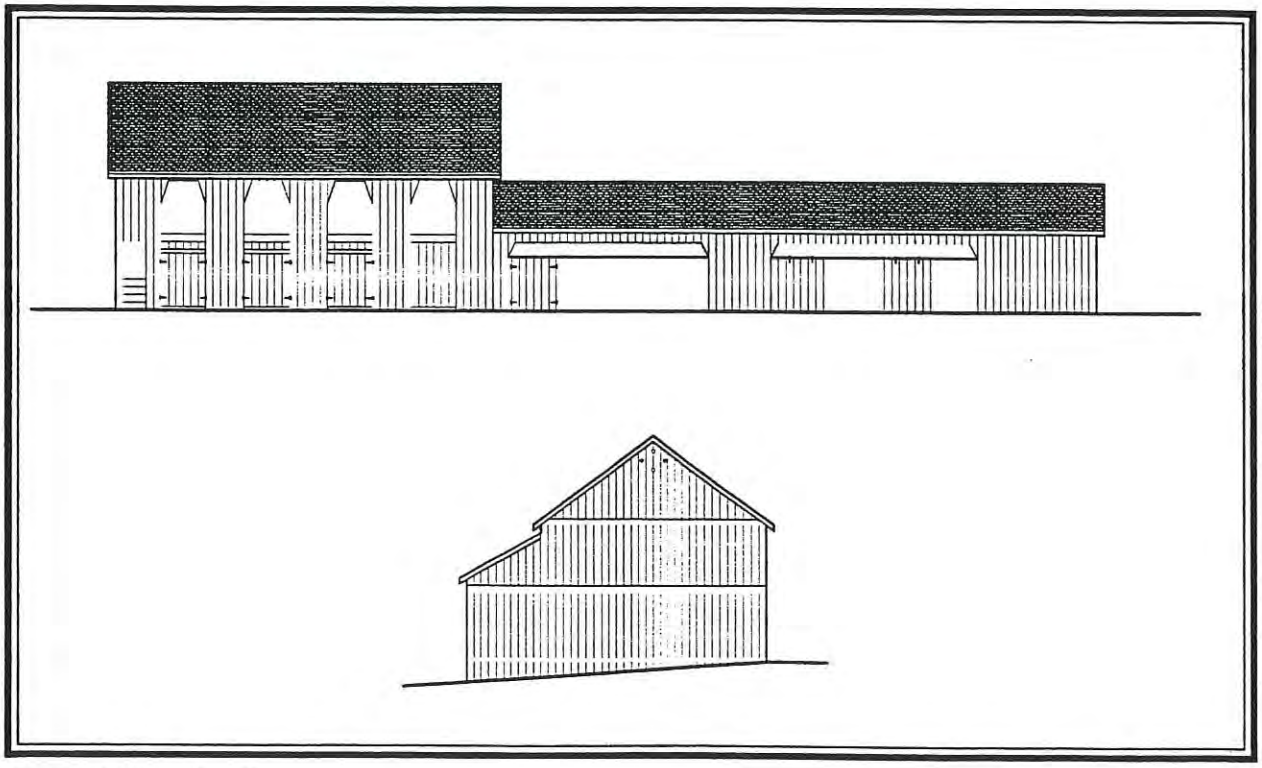


Elevation and floor plans of the proposed Caretaker's Residence.

Section 4 - **Master Plan Recommendations**



Ranch House and Barn.



Proposed Barn elevation.

X. NOISE

Existing Setting:

Noise is defined as any unwanted sound that disturbs human activity. Environmental noise levels typically fluctuate over time, and different types of noise descriptors are used to account for this variability. Measuring noise levels involves intensity, frequency, and duration, as well as time of occurrence.

Some land uses are considered more sensitive to ambient noise levels than other uses, due to the amount of noise exposure and the types of activities involved. Residences, motels, hotels, schools, libraries, churches, nursing homes, auditoriums, parks, and outdoor recreation areas are generally more sensitive to noise than are commercial and industrial land uses.

The City of Long Beach uses the State Noise/Land Use Compatibility Standards, which suggests a desirable exterior noise exposure at 65 dBA CNEL for sensitive land uses such as hotels. Less sensitive commercial and industrial uses may be compatible with ambient noise levels up to 70 dBA.

The City of Long Beach has an adopted Noise Ordinance that sets exterior and interior noise standards. The site is in district one of the Noise Ordinance. Exterior noise limits are set forth as follows:

Time Period	Noise Level (dBA)
Day: 7 a.m. – 10 p.m.	50
Night: 10 p.m. – 7 a.m.	45

Rancho Los Cerritos is nestled between a single-family residential neighborhood and a private country club golf course. The primary noise generated in the vicinity comes from private parties at Virginia Country Club and special events at the Rancho.

Records of the Long Beach Police Department indicate that during the past 6 months there were no noise complaints in regards to noise generated at the Rancho.

The Long Beach Office of Noise Control records indicate that there are no complaints regarding noise generated at the Rancho.

Anticipated Impacts:

Construction:

Evacuation, site preparation, and construction can be anticipated to generate noise levels that exceed the ambient noise level. Figure XX illustrates the typical construction noise levels. Construction activities will be short-term and temporary in nature and are not considered to be significant since construction will not occur during evening and weekend hours or on public holidays.

Operational:

Noise levels regarding the use of the visitor center and the new barn facility will be the same or possibly less than current operations. Because the orientation of these facilities is inward to the Rancho, they will serve as a noise buffer to the adjacent neighborhood. The barnyard, where outdoor activities will occur, is buffered by the barn structure.

Noise levels from parking cars in the existing parking lot on the western portion of the site will decrease when the parking lot is removed and becomes open space.

Noise generated from special events at the Rancho are considered to be less than significant because the events do not occur after 10 p.m. The majority of events take place inside structures. The larger special events that are held outdoors, such as Mud Mania, end early by 4:30 p.m.

Buses that arrive at the site carrying school children will not be allowed to idle while waiting. They will be required by Rancho staff to be turned off immediately.

Mitigation Measures:

1. Construction activities are limited to the hours between 7am and 7 pm.
2. All construction equipment operating on-site shall have properly operating mufflers.
3. Equipment and materials staging shall be as far from noise-sensitive uses as is practical, consistent with construction requirements.
4. Electrically powered equipment shall be used instead of equipment driven by internal combustion engines where feasible.
5. Siting semi-stationary heavy equipment shall be as far from noise-sensitive uses as is practical, consistent with

Unavoidable Adverse Impacts:

None are anticipated with the implementation of the mitigation measures.

Cumulative Impacts:

Cumulative Impacts:

None are anticipated since this is an isolated and final project.

XI. POPULATION AND HOUSING

Existing Setting:

The site is in census tract 5718. The following is a demographic profile of the area, based upon the 1990 census.

The Caretaker currently resides in the Ranch House.

Anticipated Impacts:

The proposal will not change the number of dwelling units on-site nor will the proposal change the dwelling units or population in the project area.

Mitigation Measures:

None are proposed, since no impacts are anticipated.

Unavoidable Adverse Impacts:

None are anticipated.

Cumulative Impacts:

None are anticipated since this is an isolated and final project.

City of Long Beach, California

DEMOGRAPHIC/ECONOMIC PROFILE OF TRACT 5718

Population

POPULATION AND AGE	(Persons)	
Total 1990 population	3,131	100.0%
Under 18 years of age	540	17.2%
18 to 64 years of age	1,849	59.1%
65 years of age and over	742	23.7%
Median age (in 1990)	44.3	years

RACE/ORIGIN (1990)	(Persons)	100.0%
American Indian and Others	10	0.3%
Asian and Pacific Islanders	170	5.4%
Black/Afro-American	63	2.0%
Hispanic (of any race)	204	6.5%
White/Caucasian	2,684	85.7%

TYPES OF HOUSEHOLDS	(Hhlds)	
Total households in 1990	1,326	100.0%
Family households	889	67.0%
Couple/children under 18	264	29.7%
Single/children under 18	33	3.7%
No children under 18	592	66.6%
One-person household	365	27.5%
Two or more unrelated	72	5.4%
Persons per household	2.30	

IN GROUP QUARTERS	(Persons)	
Total in Group Quarters	86	100.0%
Institutionalized	76	88.4%
All others (inc. military)	10	11.6%

OWNED OR RENTED	(Hhlds)	100.0%
Owned or purchasing	896	72.5%
Rented for cash or no rent	340	27.5%

SCHOOL ENROLLMENT	(Persons)	
Population enrolled	760	100.0%
Preprimary	64	8.4%
Elementary/High School	428	56.3%
College/Graduate/Prof.	268	35.3%

HIGHEST EDUCATION	(Persons)	
Total age 25 or more	2,425	100.0%
Less than High School	148	6.1%
High School only	441	18.2%
Some college or AA degree	753	31.1%
BS/BA (assumes HS degree)	608	25.1%
Graduate (assumes BS/BA)	475	19.6%

LANGUAGE AT HOME	(Persons)	
Population age five or more	3,031	100.0%
Language other than English	306	10.1%
Spanish spoken at home	131	42.8%
Asian lanquage at home	87	28.4%
English not very good	91	3.0%

Housing

HOUSING & VACANCIES	(Units)	
Total 1990 housing units	1,384	100.0%
Total vacant (1990)	58	4.2%
For sale vacancies	12	1.3%
For rent vacancies	18	5.0%
Vacant and boarded up	0	0.0%

UNITS IN STRUCTURE	(Units)	100.0%
1-unit/ detached (SFD)	843	60.9%
1-unit/ attached	174	12.6%
2-4 units	73	5.3%
5-9 units	23	1.7%
10 or more units	208	15.0%
Mobile homes/other	63	4.6%

VALUE OF SFD UNITS	(Units)	
Total owned SFD units	818	100.0%
Less than $175,000	26	3.2%
$175,000 to $249,000	70	8.6%
$250,000 and over	722	88.3%
Median value (1990)	$458,500	

MONTHLY RENT	(Units)	
Total units with contract rent	324	100.0%
Less than $500	87	26.9%
$500 to $749	114	35.2%
$750 and over	123	38.0%
Median contract rent (1990)	$617	

YEAR HOUSING BUILT	(Units)	100.0%
After 1985	96	6.9%
1960 to 1984	433	31.3%
1940 to 1959	520	37.6%
Before 1940	335	24.2%

NUMBER OF BEDROOMS	(Units)	99.9%
No bedrooms	50	3.6%
1 bedroom	221	16.0%
2 or 3 bedrooms	847	61.2%
4 or more bedrooms	264	19.1%

VEHICLES AVAILABLE	(Hhlds)	100.0%
None available	61	4.6%
1 only for household	404	30.5%
2 or more for household	861	64.9%

YEAR MOVED IN (1990)	(Hhlds)	100.0%
After 1985	638	48.1%
1970 to 1984	414	31.2%
Before 1970	274	20.7%

CONDOMINIUMS (1990)	(Units)
Condominium ownership	157

City of Long Beach, California

DEMOGRAPHIC/ECONOMIC PROFILE OF TRACT 5718

Income and Employment

1989 ANNUAL INCOME	(Hhlds)	
Total households (1990)	1,350	100.0%
Less than $25,000	276	20.4%
$25,000 to $49,999	284	21.0%
$50,000 and over	790	58.5%
Median household (1989)	$61,437	
Median family (1989)	$85,352	
Median nonfamily (1989)	$27,650	
Per Capita (1989)	$41,770	

INCOME TYPE (1990)	(Hhlds)	
Wage and salaries	1,006	74.5%
Social Security	400	29.6%
Public assistance	33	2.4%
Retirement	211	15.6%

POVERTY STATUS	(Persons)	
Total for whom determined	3,015	100.0%
Below poverty level	226	7.5%
Total children under 18 years	525	100.0%
Below poverty level	69	13.1%
Total 65 years and over	666	100.0%
Below poverty level	32	4.8%
Total families	915	100.0%
Below poverty level	36	3.9%

EMPLOYMENT STATUS	(Persons)	
Civilian Labor Force	1,677	100.0%
Unemployed (1990)	58	3.5%

OCCUPATIONAL PROFILE	(Persons)	
Total employed persons	1,619	100.0%
Exec., admin., manager	461	28.5%
Professional speciality	491	30.3%
Technicians and support	27	1.7%
Sales occupations	209	12.9%
Admin. support, clerical	193	11.9%
Household and service	124	7.7%
Farming, forestry, fishing	0	0.0%
Precision production, craft	66	4.1%
Machine operators	19	1.2%
Transportation occupations	12	0.7%
Handlers and laborers	17	1.1%

Jobs, Historic Data, and Projections

EMPLOYMENT	(Jobs)	
Total employment (1990)	2,430	100.0%
Agriculture	4	0.2%
Mining	50	2.1%
Construction	24	1.0%
Manufacturing	20	0.8%
Utilities	50	2.1%
Wholesale	86	3.5%
Retail	258	10.6%
Finance/Ins/Real Estate	309	12.7%
Services	1,463	60.2%
Government	165	6.8%

1980 POPULATION	(Persons)	
Total 1980 population	3,010	100.0%
Asian/American Ind/Other	96	3.2%
Black/Afro-American	50	1.7%
Hispanic (of any race)	140	4.7%
White/Caucasian	2,724	90.5%

1980-1990 CHANGE	(Persons)	
Change in Population	121	4.0%
Asian/American Ind/Other	84	87.5%
Black/Afro-American	13	26.0%
Hispanic (of any race)	64	45.7%
White/Caucasian	(40)	-1.5%

1980-1990 HOUSING	(Units)	
Total 1980 housing	1,320	
1980-1990 change	64	4.8%
1980 persons per household	2.36	

1990-1993 PERMIT ACTIVITY	
Housing completions	2
Housing demolitions	2
Average value of residential remodel	$5,913
Average value of residential addition	$29,910
Res. add/rem permits per 100 units	15.5
Nonresidential demolitions	5

PROJECTIONS	(Persons)	(Units)
1995	3,024	1,384
2000	2,974	1,384
2005	2,926	1,384
2010	2,880	1,385

Shading indicates statistics that are a subset or of a different type then the section total.
Sources are the 1990 Census and the Department of Planning and Building, Advance Planning Division.
All data are 1990 unless otherwise indicated. Please call (310) 570-6630 for more information.
Tract boundaries and/or maps are available from the City, most libraries, and the U.S. Census Bureau.
Sample-based statistics may not sum to 100.0%. Projections were completed in June, 1993.

XII. PUBLIC SERVICE

Existing Setting:

Fire Protection

Fire protection and emergency medical service to the project area is provided by the Long Beach Fire Department. The closest stations are No. 9 which is located at 3917 Long Beach Boulevard and No. 11 which is located at 160 E. Market Street.

Emergency access is available from Virginia Road, a 36 foot wide public street. During special public events at the Rancho both sides of Virginia Road are used for parallel parking. In this case, 20 feet will be available for emergency services.

Police Services

Police services are provided by the Long Beach Police Department. The closest station is that of the North Division station which is located at 4891 Atlantic Avenue.

The Los Cerritos neighborhood enjoys a very low crime rate. From April 1998 through March 1999 35 total crimes were reported. A high crime area is considered to be an area were 152 or more total crimes are committed

Anticipated Impacts:

The plan check process will insure that the project is built in conformance with the Uniform Building Code. On a preliminary basis, Fire Prevention has already reviewed the proposal, requested additional information relative to fire protection measures, and upon review of that material given preliminary approval.

The Fire Department indicates that no significant impacts will occur providing that the plans meet the Uniform Fire Code. The Plan Check process will insure such compliance.

Further, they have reviewed the preliminary plans and stated that the 20 foot wide access on Virginia Drive (when cars are parked on the street) is adequate for emergency fire access.

Police indicate that the current level of usage does not impact the department. However, an increase in public events will likely cause an increase in demand for service. The below listed mitigation are recommended to reduce demand for police service.

Unavoidable Adverse Impacts:

None are anticipated.

Cumulative Impacts:

None are anticipated.

XIII. TRANSPORTATION

Existing setting:

Traffic Impact Analysis

The Linscott, Law and Greenspan Engineers traffic report analyzes existing and future near-term peak hour traffic conditions based upon complete implementation of the Rancho's Master Plan, which was conservatively assumed to occur in the Year 2004 to determine the impacts of the project in the immediate future. (Refer to Traffic Impact Analysis and Parking Demand Study, Rancho Los Cerritos Historic Ranch Master Plan Implementation by Linscott, Law and Greenspan in the Appendix C)

Therefore, peak hour traffic forecasts for the 2004 horizon year have been projected by increasing existing traffic volumes by an ambient growth rate of two percent per year. The two intersections selected for evaluation provide local access to the site area, they are:

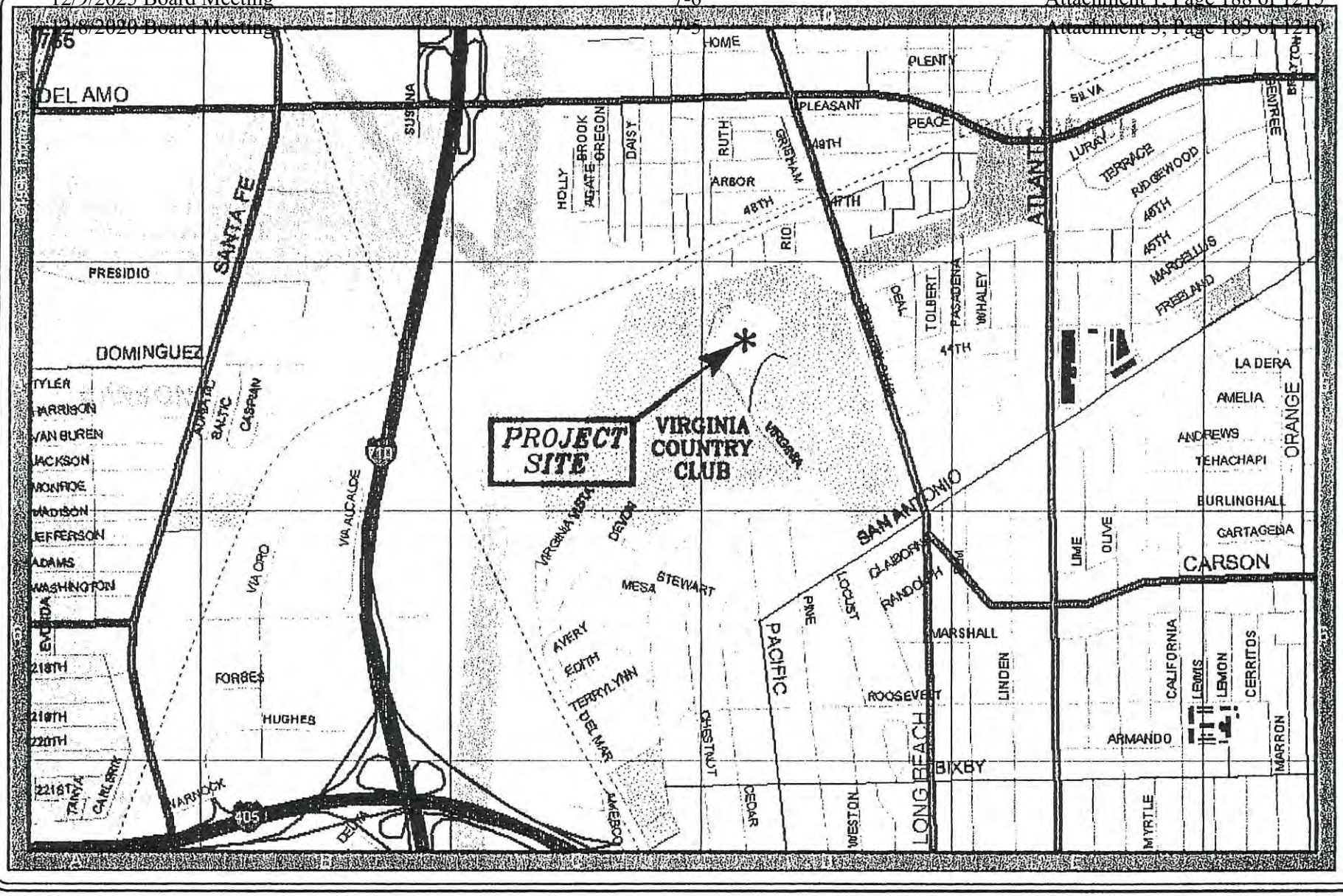
Long Beach Boulevard at San Antonio Drive
Virginia Road at San Antonio Drive

EXISTING STREET NETWORK

Regional access to the project site is provided by the San Diego (I-405) Freeway, which generally runs in a northwest to southeast direction in the vicinity of the project site. This 8-lane facility, which is located south of the project, is a major highway extending through Los Angeles County and Orange County, and links Long Beach with neighboring communities. Direct access to the site from the I-405 Freeway is provided via the Long Beach Boulevard.I-405 Freeway interchange. Secondary regional access to the site is provided via the I-710 Freeway/Del Amo Boulevard interchange.

The principal local network of streets serving Rancho Los Cerritos Historic site includes Long Beach Boulevard, San Antonio Drive, and Virginia Road. The following discussion provides a brief synopsis of these key area streets. These descriptions are based on an inventory of existing roadway conditions.

Long Beach Boulevard is a four-lane divided roadway, oriented in the north-south direction. The posted speed limit is 35 miles per hour (mph). On-street parking is permitted on both sides of the street in the study area. A four-phase traffic signal controls the study intersection of Long Beach Boulevard at San Antonio Drive; San Antonio is currently controlled via a split phase, while the southbound left-turn is protective/permissive. The City of Long Beach Circulation Element designates Long Beach Boulevard as a Major Arterial.

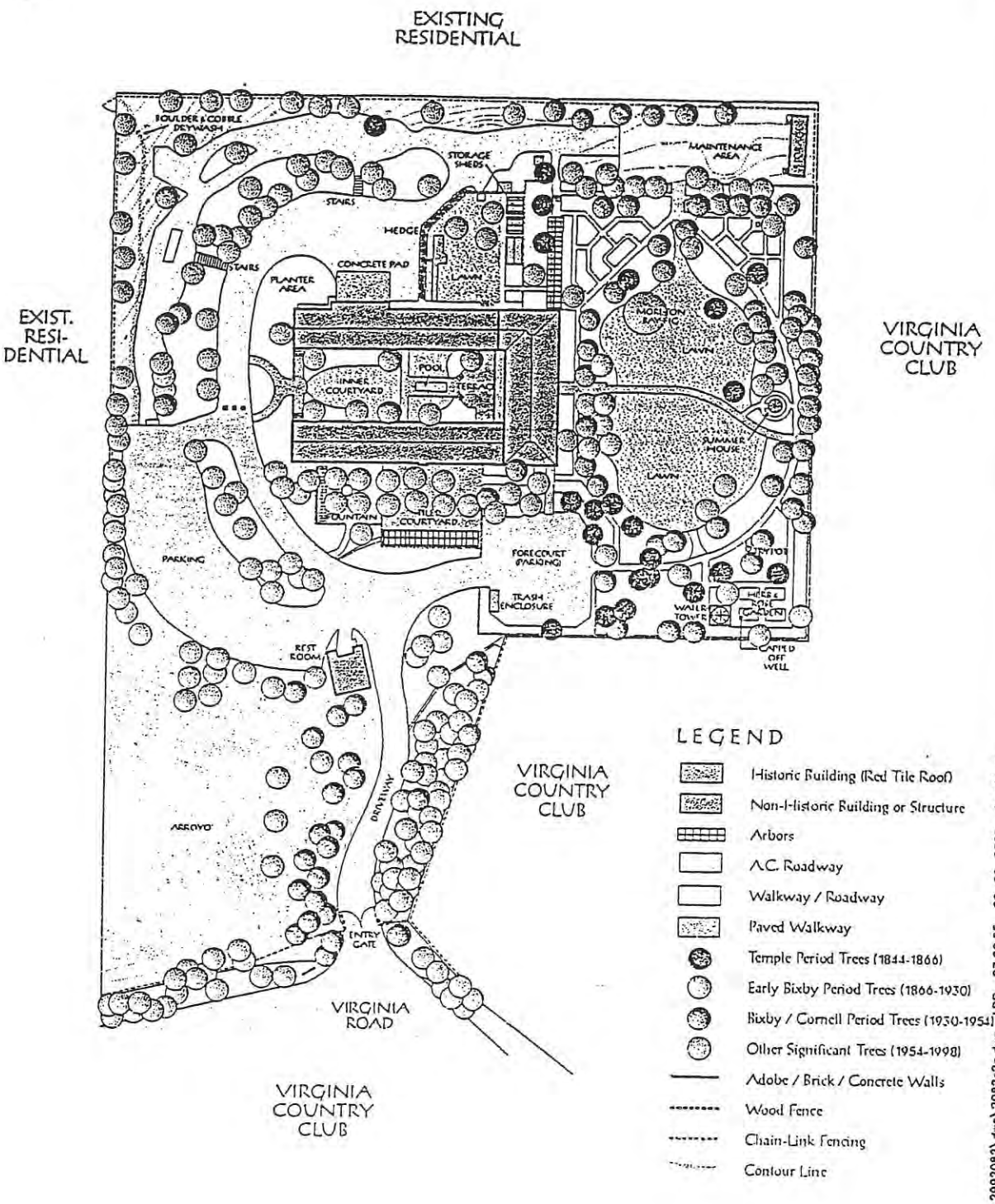


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VICINITY MAP

RANCHO LOS CERRITOS, LONG BEACH

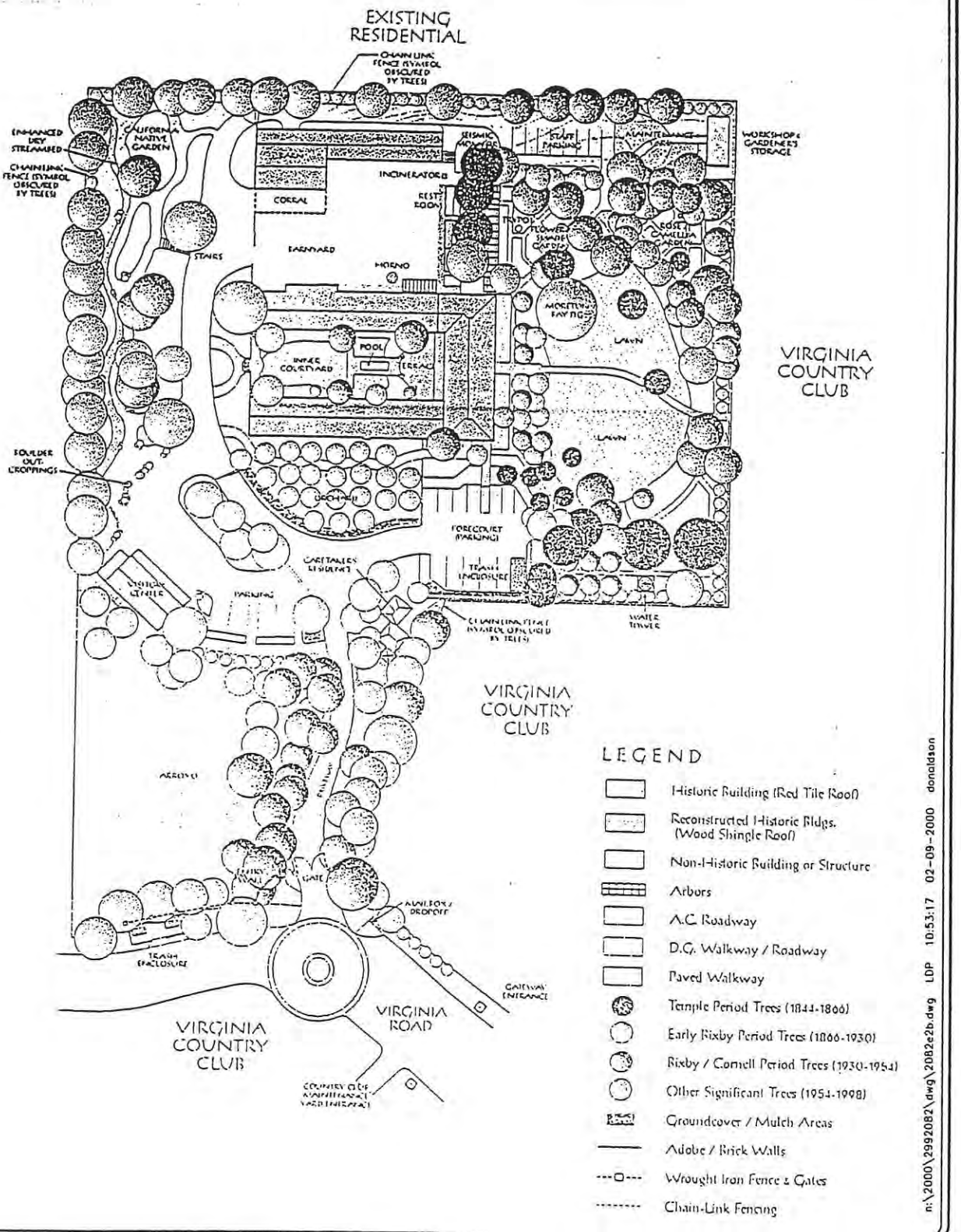


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EXISTING SITE PLAN

RANCHO LOS CERRITOS, LONG BEACH



N NO SCALE

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CONCEPTUAL MASTER PLAN
RANCHO LOS CERRITOS, LONG BEACH

San Antonio Drive is an east-west roadway, located south of the project site. East of Long Beach Boulevard, San Antonio Drive provides two travel lanes per direction, divided by a raised median. The speed limit is 35 mph. On-street parking is permitted on both sides of the street. The City of Long Beach Circulation Element designates San Antonio Drive, east of Long Beach Boulevard, as a Minor Arterial. West of Long Beach Drive, San Antonio Drive is a two-lane, undivided roadway with a speed limit of 25 mph. On-street parking is permitted on both sides of the street. The study intersection of San Antonio Drive and Virginia Road is currently All-Way Stop-Controlled.

Virginia Road is a north-south roadway, providing direct access to the Rancho Los Cerritos Historic site, as well as the Virginia Country Club. Virginia Road is a two-lane undivided local collector (one per direction). The speed limit is 25 mph. The majority of Virginia Road, north of San Antonio Drive is undeveloped, with no curb or gutter. However, on-street parking is permitted on both sides of the street. According to recent traffic counts conducted in December 1999, daily traffic on Virginia Road, north of San Antonio Drive, totals approximately 1,503 vehicles per day (vpd) on weekday (average of Monday through Friday), and roughly 1,345 vpd on a weekend day (average of Saturday and Sunday).

Exhibit 1 presents an inventory of the existing roadway conditions for the arterials and intersections evaluated in this report. The number of travel lanes and intersection controls for the key area intersections are identified.

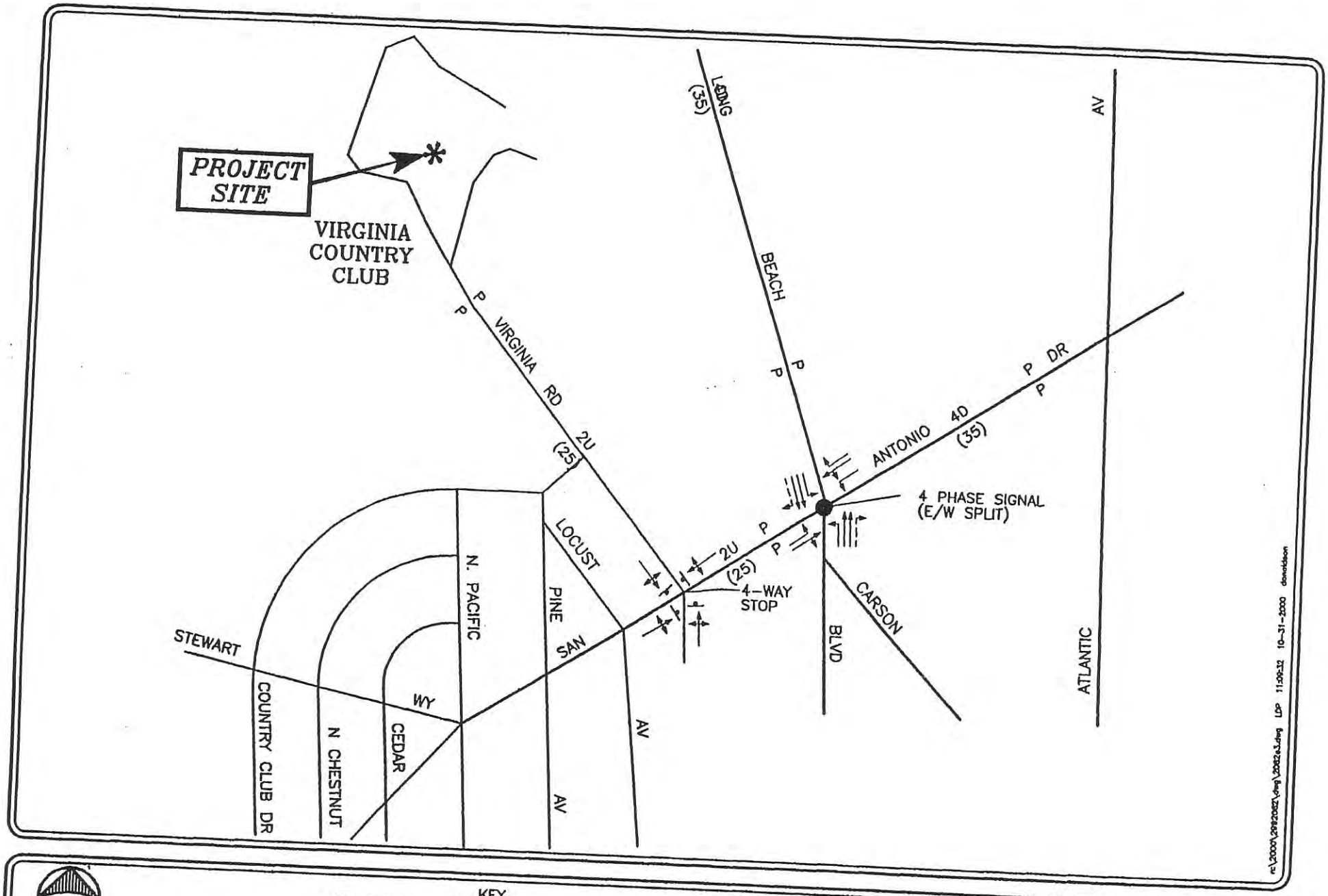
Would the project:

a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?

Existing Daily Traffic Volumes

Table 7 presents the existing daily traffic volumes collected on Virginia Road, between San Antonio Drive and the Rancho Los Cerritos gated entry. A comparison of the data shows that on a daily basis, traffic volumes on Virginia Road are greater during a weekday than on a weekend day. The difference in traffic volumes on Virginia Road, observed north of San Antonio Drive and north of the Country Club Drive, is due to the drip-off into the residential neighborhoods fronting Virginia Road and those accessed via Country Club Drive.

The Rancho currently generates, on average, 86 daily trips on a weekend day and 89 daily trips on a weekday. Please note that trip data was collected on each day of the week and included a day (Thursday, December 16, 1999) when a special event took place.



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EXISTING LANE CONFIGURATIONS

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DAILY TRAFFIC VOLUME SUMMARY[5]
Ranch Los Cerritos Historic Site Master Plan
Long Beach, California

Day of Week	Rancho Driveway, north of Virginia Road	Virginia Road, north of Country Club Drive	Virginia Road, north of San Antonio Road	Average Daily Traffic Volumes
Weekend				
Saturday, December 18, 1999	82	996	1,452	843
Sunday, December 19, 1999	90	970	1,238	766
Average Weekend Volume	**86**	**983**	**1,345**	**805**
Weekday				
Monday, December 20, 1999	57	960	1,372	796
Tuesday, December 14, 1999	29	857	1,293	726
Wednesday, December 15, 1999	70	1,159	1,597	942
Thursday, December 16, 1999	208[6]	1,220	1,660	1,029
Friday, December 17, 1999	82	1,038	1,595	905
Average Weekday Volume	**89**	**1,047**	**1,503**	**880**

5 Source: Traffic counts conducted by Accutek in December 1999. Please note that the traffic counts may represent fewer visitors than normal due to the Christmas season.

6 Please note that a Holiday Open House event took place on Thursday, December 16, 1999, which accounts for the high visitor count.

Table 7

This information is necessary to evaluate current intersection conditions. The Traffic Impact Report utilized the ICU Method of Analysis, which relates to intersection volume and capacity, and the Level of Service concept, which is a relative measure of the intersection performance. For a detailed description of these methods of analysis, please see Appendix C.

Two key study intersections were designated for evaluation since the majority of "Rancho" traffic utilize these intersections to access the site. They are the signalized intersection at Long Beach Boulevard and the 4-way stop intersection at San Antonio Drive and Virginia Road and San Antonio Drive.

Exhibit 2 describes the existing 1999 peak hour Level of Service (LOS) at the studied intersections. The signalized intersection at Long Beach Boulevard and San Antonio operates at LOS A (am peak) and LOS C (pm peak). The 4-way stop intersection at Virginia Road and San Antonio Drive operates at LOS A (am peak) and LOS A (pm peak).

Anticipated Impacts:

Total annual visitors at the Rancho is projected to increase by 16,400 persons to an estimated total of 32,800 persons per year. Of the projected 16,400 attendance increase, 1,480 is attributable to the Barns Complex for lectures/workshops and docent training/classes, as well as use of the research library for general meetings and foundation activities 3,530 is attributable to increased attendance at weekend public events. The remaining 11,400 person increase in projected annual attendance figures will be the result of normally anticipated growth that would occur even if the Master Plan were not implemented.

In order to predict how increased traffic trips to and from the built-out Rancho will affect the two studied intersections, the Traffic Study used a multi-step forecasting methodology.

The first step is estimate additional traffic generation associated with new and or reconfigured development at the site. The second step is traffic distribution, which identifies the origins and destinations of inbound and outbound project traffic. The third step is traffic assignment, which involves the allocation of project traffic to streets and intersections in the study area. For a detailed description of this forecasting methodology and its conclusions, see Appendix C.

Table 8 displays the results of the forecasting methodology. As shown, the number of trips generated by the Rancho will increase from the current level of 184 daily trips (92 inbound and 92 outbound) to 278 daily trips (139 inbound and 139 outbound) after complete implementation of the Master Plan. Of the projected 278 daily trips, only 31 trips are a direct result of expansion of the

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1999 EXISTING PEAK HOUR LEVELS OF SERVICE[8]
Ranch Los Cerritos Historic Site Master Plan
Long Beach, California

Key Intersection	Time Period	Control Type	ICU or HCM	LOS
1) Long Beach Boulevard @ San Antonio Drive[9]	AM PM	4ϕ Traffic Signal	0.586 0.728	A C
2) Virginia Road @ San Antonio Drive	AM PM	All-Way Stop	3.6 sec/veh 2.6 sec/veh	A A

8 Appendix B contains ICU/LOS and HCM/LOS calculation sheets for the key study intersections.
9 The existing traffic signal operates as a split phase in the east/west direction (San Antonio Drive) and a protective/permissive southbound left-turn phase.

Exhibit 2

LINSCOTT LAW & GREENSPAN ENGINEERS

PROJECT TRAFFIC GENERATION FORECAST
Ranch Los Cerritos Historic Site Master Plan
Long Beach, California

Project Description	Daily (2-Way)	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Generation Forecast:							
Existing Site Generate Traffic							
• Existing Administrative/ Volunteer Functions (No Tours/Events) [10]	90	2	1	3	4	4	8
• Existing Rancho Los Cerritos Historic Site[11]	94	0	0	0	1	14	15
Subtotal – Existing Site Traffic:	184	2	1	3	5	18	23
New Site Generated Traffic[12]							
• Rancho Los Cerritos *Growth*[13]	63	4	0	4	1	18	19
• Rancho Los Cerritos *Expansion*[14]	*31*	*0*	*0*	*0*	*0*	*0*	*0*
Subtotal – New Site Traffic:	94	4	0	4	1	18	19
Total Rancho Los Cerritos Trip Generation Potential:	278	6	1	7	6	36	42

10 Existing average daily and peak hour trip generation for the existing Administrative/Volunteer functions at the Rancho, exclusive of "attendance trips" due to the Historic Ranch, is based on driveway counts conducted during the week of December 14, 1999 to December 20, 1999 (Refer to Appendix A). Existing traffic represents the average of the five-day weekday count. The majority of these volumes represent trips made to and from the Rancho by Staff/Employees and Volunteers, and are considered "repeat" trips, not "new" trips generated by Visitors to the site.

11 Refer to Appendix C-1, C-2, and C-3 for detailed trip generation calculations for the Rancho Los Cerritos Historic Site.

12 Refer to Appendix C-4, C-5, and C-6 for detailed trip generation calculations for the Rancho Los Cerritos Historic Site.

13 Rancho Los Cerritos *Growth* refers to the increase of attendance for general tours and school tours. 4 AM Peak Hour inbound trips and 4 outbound PM peak hour trips represent the increase of project trips due to the projected number of full-time and part-time employees.

14 Rancho Los Cerritos *Expansion* refers to the increase of attendance due to miscellaneous uses (i.e. meeting room).

Table 8

Rancho facilities. The remaining increase of 63 daily trips is a factor of normal growth at the Rancho, which will result without the Rancho expansion/renovation.

TRAFFIC IMPACT ANALYSIS METHODOLOGY

Impact Criteria and Thresholds

The relative traffic impacts of the added traffic volumes generated by the proposed Rancho Los Cerritos Master Plan during the AM and PM peak hours of a "typical" weekday were evaluated based on analysis of Year 2004 future operating conditions at the two key study intersections, without, then with, the proposed project. The previously discussed capacity analysis procedures were utilized to investigate the future volume-to-capacity relationships and service level characteristics at each study intersection. The significance of the potential impacts of the project at each key intersection was then evaluated using the LOS standards of the City of Long Beach and the traffic impact criteria contained in County of Los Angeles CMP guidelines.

As mentioned earlier, the City of Long Beach considers LOS D (ICU=0.81 – 0.90) to be the minimum acceptable that should be maintained during the peak commute hours, or the current LOS if that existing LOS is worse than LOS D (i.e. LOS E of F). The LA County CMP criteria identifies a significant project impact when the project increases traffic demand at a study intersection by 2% of capacity (ICU > 0.020), causing or worsening unacceptable LOS E or F conditions.

Traffic Impact Analysis Scenarios

The following scenarios are those for which LOS calculations have been performed:

Existing Traffic Conditions
Background (Existing plus Growth to 2004 at 2.0% per year)
Future with Rancho "Growth"
Future with Rancho "Expansion"

PEAK HOUR INTERSECTION CAPACITY ANALYSIS

Year 2004 Horizon Year

Table 9 summarizes the peak hour Level of Service results at the four larger study intersections for the 2004 horizon year. The first column (1) of LOS values in Table 9 presents a summary of existing peak hour traffic conditions. The second column (2) lists future Year 2004 background traffic conditions based on existing intersection geometry, but without any project traffic. The third column (3) presents future forecast traffic conditions with the addition of traffic generated

by the anticipated increase in annual visitorship to the Rancho (normal Rancho "growth").

The fourth (4) column summarizes the projected service levels with the additional traffic generated by miscellaneous uses. The fifth column (5) shows the increase in ICU value due to the total added peak hour trips generated by the Rancho and indicates whether the project will have a significant impact.

A review of Table 9 indicates that the two study intersections currently operate at LOS A or C during the AM and PM peak hour of a "typical" weekday. An analysis of Year 2004 background traffic conditions indicates that both study intersection of Long Beach Boulevard and San Antonio Drive is expected to deteriorate to LOS B during the AM peak hour.

Review of Columns 3 and 4 of Table 9 indicate that traffic associated with the projected increases in Rancho's annual attendance will not have a significant impact at either of the two study intersections, when compared to the City of Long Beach LOS standards and County of Los Angeles CMP impact criteria. No change in forecast service levels is anticipated with the addition of new Rancho traffic (comparison of column 2 with 3 and 4 of Table 9). Given the "weekday" traffic generation potential of the project, it is clear that the implementation of the Rancho Los Cerritos Master Plan does not have a significant traffic impact on the local arterial network16.

PROJECT-SPECIFIC INTERSECTION IMPROVEMENTS

The intersection level of service results summarized in Table 7 indicates that the implementation of the Rancho Los Cerritos Master Plan is not expected to have a significant traffic impact at either of the two key study intersections when compared to the LOS standards of the City of Long Beach. Therefore, no project-specific intersection mitigation measures are required of the Rancho Los Cerritos Historic site.

Would the project:

b) Result in inadequate emergency access?

Existing Conditions:

Rancho Los Cerritos currently utilizes "on-street" parking to accommodate attendance for special events. Parallel parking is allowed on both sides of Virginia Road.

South of the Rancho's entrance, the roadbed is 36 feet from curb to curb. When vehicles are parked on both sides of the street, approximately 20 feet is available to accommodate emergency vehicles to the Rancho and to the adjacent

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YEAR 2004 PEAK HOUR INTERSECTION CAPACITY ANALYSIS [15]
Ranch Los Cerritos Historic Ranch Master Plan
Long Beach, California

Key Intersections	Time Period	(1) 1999 Existing Traffic Conditions		(2) Year 2004 Background Traffic		(3) Year 2004 Plus Rancho "Growth"		(4) Year 2004 Plus Rancho "Expansion"		(5) Total Rancho Project Impact/ Significance	
		HCM or ICU	LOS	HCM or ICU	LOS	HCM or ICU	LOS	HCM or ICU	LOS	ICU Inc.	Y/N
1) Long Beach Boulevard @ San Antonio Drive	AM	0.586	A	0.631	B	0.632	B	0.632	B	0.000	N
	PM	0.728	C	0.793	C	0.798	C	0.798	C	0.000	N
2) Virginia Road @ San Antonio Drive	AM	3.6 sec/veh	A	4.6 sec/veh	A	4.6 sec/veh	A	4.6 sec/veh	A	--	--
	PM	2.6 sec/veh	A	3.1 sec/veh	A	3.3 sec/veh	A	3.3 sec/veh	A	--	--

15 Appendix B contains LOS calculation sheets for the key study intersections.

Table 9

residential neighborhood.
Because the roadbed narrows to 25 feet north of the Rancho's driveway, public parking will not be allowed on this section of the road.

Would the project:

c) Result in inadequate parking capacity?

Existing Conditions:

The Rancho currently provides 34 parking spaces for use by employees, visitors, tour attendees and docents. During large and medium scale special events, the on-site parking lot is used primarily for event attendees and disabled persons parking. Rancho Los Cerritos staff and event volunteers park their vehicles off-site, with an event volunteer providing shuttle service from an off-site parking lot.

Approximately 126 "overflow" curb-side spaces on Virginia Road are utilized for special events.

Currently, the Rancho operates with a "grand-fathered" non-conforming status with regards to parking. This means that the Rancho does not have to provide parking spaces according to current municipal code requirements. However, with the implementation of the Master Plan, a parking based municipal code analysis as well as a functional parking analysis is required.

The Rancho's Master Plan reduces the on-site parking by 10 spaces from 34 to 24 parking spaces to provide more open space at the site and accommodate the Visitor Center.

Anticipated Impacts:

Daily operations (excluding special events): The parking analysis prepared by Linscott Law & Greenspan states that the "purpose of the parking study is to determine the number of parking spaces that are needed to currently support the day-to-day operations of the Rancho on a "typical weekday and weekend day, and at the completion of the Master Plan."

Functional parking demand for the Rancho was estimated by studying the operating schedule of the Rancho, employee/docent work schedules, as well as the expected number of daily visitors, and the average number of people per vehicle.

Tables 10 and 11 summarize the functional peak hour parking needs of the existing Rancho. Currently, the weekday peak period demand for parking spaces is 24 and the weekend peak period demand is 22 parking spaces. Because the Rancho currently provides 34 parking spaces, these peak hour

LINSCOTT LAW & GREENSPAN ENGINEERS

"EXISTING" AVERAGE WEEKDAY HOURLY PARKING DEMAND [1]

Rancho Los Cerritos Historic Ranch *Master Plan Implementation*

Long Beach, CA

USE	(1) Rancho Administration		(2) Rancho Staff Visitors		(3) Rancho Volunteers/Docents		(4) Rancho General Tour		(5) Rancho Misc. Uses		(6)	(7)
SIZE	6 employees		4 visitors		8 docents		37 tour attendees		10 Visitors			Comparison with Existing Supply of
Pkg Rate [2]	@1 sp/employee		@ 1 space/visitor		@1 sp/docent		@1 sp/7.8 attendee		@1 sp/1.5attendee			70 spaces [3]
Rq'd Spaces	Spaces	6	Spaces	4	Spaces	8	Spaces	13	Spaces	7	Total	Hourly
TIME OF DAY	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Hourly Parking Demand	Surplus (+)/ Deficiency (-)
6:00 AM	20%	1	0%	0	0%	0	0%	0	0%	0	1	+69
7:00 AM	20%	1	0%	0	0%	0	0%	0	0%	0	1	+69
8:00 AM	63%	4	50%	2	63%	5	0%	0	0%	0	11	-59
9:00 AM	93%	6	75%	3	93%	7	0%	0	15%	1	17	+53
10:00 AM	100%	6	100%	4	100%	8	0%	0	55%	4	22	+48
11:00 AM	100%	6	100%	4	100%	8	0%	0	70%	5	23	+47
12:00 PM	90%	5	50%	2	90%	7	5%	1	45%	3	18	+52
1:00 PM	90%	5	75%	3	80%	6	30%	4	0%	0	18	+52
2:00 PM	97%	6	100%	4	75%	6	60%	8	0%	0	24	+46
3:00 PM	93%	6	100%	4	75%	6	60%	8	0%	0	24	+46
4:00 PM	77%	5	75%	3	50%	4	15%	2	0%	0	14	+56
5:00 PM	47%	3	50%	2	40%	3	0%	0	0%	0	8	+62
6:00 PM	23%	1	0%	0	0%	0	0%	0	0%	0	1	+69
7:00 PM	20%	1	0%	0	0%	0	0%	0	0%	0	1	+69
8:00 PM	20%	1	0%	0	0%	0	0%	0	0%	0	1	+69
9:00 PM	20%	1	0%	0	0%	0	0%	0	0%	0	1	+69
10:00 PM	20%	1	0%	0	0%	0	0%	0	0%	0	1	+69
11:00 PM	20%	1	0%	0	0%	0	0%	0	0%	0	1	+69
12:00 PM	20%	1	0%	0	0%	0	0%	0	0%	0	1	+69

[1] Hourly weekday parking profiles for Rancho Los Cerritos administration/volunteer uses are based on the Urban Lan Institute (ULI) *Shared Parking* Publication. The parking profiles for Rancho staff visitors, general tours, and classes/lectures are based on existing operations.

[2] Parking rates used to forecast the parking demands are based on average vehicles occupancies observed at the Rancho and LLG recommendations.

[3] Existing parking supply of 70 spaces consists of 34 on-site parking spaces and 36 curbside spaces on Virginia Road, north of the Virginia Country Club Driveway. Note that approximately 90 curbside spaces are provided on Virginia Road, south of the Virginia Country Club Driveway.

Table 10

LINSCOTT LAW & GREENSPAN
ENGINEERS

"EXISTING" AVERAGE WEEKEND DAY HOURLY PARKING DEMAND [1]

Rancho Los Cerritos Historic Ranch *Master Plan Implementation*

Long Beach, CA

USE	(1) Rancho Administration		(2) Rancho Staff Visitors		(3) Rancho Volunteers/Docents		(4) Rancho General Tour		(5) Rancho Misc. Uses		(6)	(7) Comparison with Existing Supply of 70 spaces [3]
SIZE	11 employees		4 visitors		4 docents		56 tour attendees		15 Visitors			
Pkg Rate [2]	@1 sp/1 employee		@ 1 space/visitor		@1 sp/docent		@1 sp/2.5 attendee		@1 sp/1.5 attendee			
Rq'd Spaces	Spaces	11	Spaces	4	Spaces	4	Spaces	22	Spaces	10		
TIME OF DAY	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Total Hourly Parking Demand	Hourly Surplus (+)/ Deficiency (-)
6:00 AM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+68
7:00 AM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+68
8:00 AM	26%	3	13%	1	25%	1	0%	0	0%	0	5	+65
9:00 AM	39%	4	19%	1	25%	1	0%	0	15%	2	8	+62
10:00 AM	42%	5	23%	1	50%	2	0%	0	55%	6	14	+56
11:00 AM	42%	5	25%	1	50%	2	0%	0	70%	7	15	+55
12:00 PM	38%	4	13%	1	75%	3	5%	1	45%	5	14	+56
1:00 PM	38%	4	19%	1	100%	4	30%	7	0%	0	16	+54
2:00 PM	41%	4	25%	1	100%	4	60%	13	0%	0	22	+48
3:00 PM	39%	4	25%	1	100%	4	60%	13	0%	0	22	+48
4:00 PM	32%	4	19%	1	75%	3	15%	3	0%	0	11	+59
5:00 PM	23%	3	13%	1	50%	2	0%	0	0%	0	6	+64
6:00 PM	23%	3	0%	0	0%	0	0%	0	0%	0	3	+67
7:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+68
8:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+68
9:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+68
10:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+68
11:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+68
12:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+68

[1] Hourly weekend parking profiles for Rancho Los Cerritos administration/volunteer uses are based on the Urban Lan Institute (ULI) *Shared Parking* Publication. The parking profiles for Rancho staff visitors, general tours, and classes/lectures are based on existing operations.

[2] Parking rates used to forecast the parking demands are based on average vehicles occupancies observed at the Rancho and LLG recommendations.

[3] Existing parking supply of 70 spaces consists of 34 on-site parking spaces and 36 curbside spaces on Virginia Road, north of the Virginia Country Club Driveway. Note that approximately 90 curbside spaces are provided on Virginia Road, south of the Virginia Country Club Driveway.

Table 11

demands are satisfied with "on-site" parking.

Tables 12 and 13 summarize the functional peak hour parking demands for the Master Plan build-out scenario. Weekday peak hour parking would require 37 parking spaces and weekend peak hour parking would require 36 parking spaces. With the reduction of on-site parking spaces from 34 to 24, future parking for peak-hour periods at the Rancho could not be accommodated on-stie and would have to spill-over to public street parking.

Parking spaces required by zoning code: Based on the square foot addition of the barns facility, the visitor's center, and the caretaker's residence, an additional 90 on-site parking spaces would be required with the expansion of the Rancho.

The functional and the code based analysis determines that the proposed project parking will not be accommodated on-site and will rely on overflow street parking. This impact is significant.

Special Events: The Rancho is host to small, mid-size, and large special events. (see Figure A). The projected peak parking demands for each of the scheduled special events was estimated in a manner similar to forecasting the trip generation of the Rancho during a typical weekday and weekend day. By using special event attendance, staffing and volunteer figures, and each event's operating schedule, the number of person trips associated with each event was derived, this was then translated to number of vehicles or parking spaces by applying parking demand rations specific to each person trip category, and consequently parking space estimates.

Exhibit B demonstrates the public on-street parking situation at the Rancho. 126 on-street public parking spaces are available along Virginia Road. Due to the nature of the area, it is rare for residents or their visitors to use this on-street parking. Virginia Country Club patrons park on-site at the golf course and adjacent residents park behind the gate on their own property or street. In addition the proposed Rancho project will provide 24 on-site spaces. These spaces combined with the on-street spaces total 150 spaces.

Table 2 summarizes the results of the parking demand analysis prepared for the 4 mid-size and 4 large-scale public events held at the Rancho. Parking needs for the New Citizens Welcome, Summer Concert Series (3 days), Antiques Appraisal Affair, and Christmas Candlelight Tours (2 days) can all be accommodated for at the Rancho and on Virginia Drive. The remaining 4 public events, the Restoration Fair, the Christmas Open House, Mud Mania, and the Foundation Fund Raiser will all be required to park Rancho staff and volunteers off-site. Mud Mania and the Restoration Fair may require some attendees to be shuttled from an off-site parking lot.

LINSCOTT LAW & GREENSPAN ENGINEERS

TABLE 12

"FUTURE" WEEKDAY HOURLY PARKING DEMAND FORECAST [1]

Rancho Los Cerritos Historic Ranch *Master Plan Implementation*

Long Beach, CA

USE	(1) Rancho Administration		(2) Rancho Staff Visitors		(3) Rancho Volunteers/Docents		(4) Rancho General Tour		(5) Rancho Misc. Uses		(6)	(7)
SIZE	11 employees		4 visitors		8 docents		75 tour attendees		21 Visitors			Comparison with Future Supply of 60 spaces [3]
Pkg Rate [2]	@1 sp/employee		@ 1 space/visitor		@1 sp/docent		@1 sp/2.8 attendee		@1 sp/1.1attendee			
Rq'd Spaces	Spaces	11	Spaces	4	Spaces	8	Spaces	27	Spaces	18		
TIME OF DAY	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Total Hourly Parking Demand	Hourly Surplus (+)/ Deficiency (-)
6:00 AM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58
7:00 AM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58
8:00 AM	63%	7	50%	2	63%	5	0%	0	0%	0	14	+46
9:00 AM	93%	10	75%	3	93%	7	0%	0	15%	3	23	+37
10:00 AM	100%	11	100%	4	100%	8	0%	0	55%	10	33	+27
11:00 AM	100%	11	100%	4	100%	8	0%	0	70%	13	36	+24
12:00 PM	90%	10	50%	2	90%	7	5%	1	45%	8	28	+32
1:00 PM	90%	10	75%	3	80%	6	30%	8	0%	0	27	+33
2:00 PM	97%	11	100%	4	75%	6	60%	16	0%	0	37	+23
3:00 PM	93%	10	100%	4	75%	6	60%	16	0%	0	36	+24
4:00 PM	77%	8	75%	3	50%	4	15%	4	0%	0	19	+41
5:00 PM	47%	5	50%	2	40%	3	0%	0	0%	0	10	+50
6:00 PM	23%	3	0%	0	0%	0	0%	0	0%	0	3	+57
7:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58
8:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58
9:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58
10:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58
11:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58
12:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58

[1] Hourly weekday parking profiles for Rancho Los Cerritos administration/volunteer uses are based on the Urban Lan Institute (ULI) *Shared Parking* Publication. The parking profiles for Rancho staff visitors, general tours, and classes/lectures are based on existing operations.

[2] Parking rates used to forecast the parking demands are based on average vehicles occupancies observed at the Rancho and LLG recommendations.

[3] Proposed parking supply of 60 spaces consists of the 24 spaces proposed in the on-site parking lots and 36 curbside spaces on Virginia Road. north of the Virginia Country Club Driveway. Note that approximately 90 curbside spaces are provided on Virginia Road, south of the Virginia Country Club Driveway.

LINSCOTT LAW & GREENSPAN ENGINEERS

TABLE 13

"FUTURE" WEEKEND DAY HOURLY PARKING DEMAND FORECAST [1]

Rancho Los Cerritos Historic Ranch *Master Plan Implementation*

Long Beach, CA

USE	(1) Rancho Administration		(2) Rancho Staff Visitors		(3) Rancho Volunteers/Docents		(4) Rancho General Tour		(5) Rancho Misc. Uses		(6)	(7)
SIZE	11 employees		4 visitors		4 docents		112 tour attendees		31 Visitors			Comparison with Future Supply of 60 spaces [3]
Pkg Rate [2]	@1 sp/1 employee		@ 1 space/visitor		@1 sp/docent		@1 sp/2.5 attendee		@1 sp/1.5 attendee			
Rq'd Spaces	Spaces	11	Spaces	4	Spaces	4	Spaces	45	Spaces	21		
TIME OF DAY	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Total Hourly Parking Demand	Hourly Surplus (+)/ Deficiency (-)
6:00 AM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58
7:00 AM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58
8:00 AM	26%	3	13%	1	25%	1	0%	0	0%	0	5	+55
9:00 AM	39%	4	19%	1	25%	1	0%	0	15%	3	9	+51
10:00 AM	42%	5	23%	1	50%	2	0%	0	55%	12	20	+40
11:00 AM	42%	5	25%	1	50%	2	0%	0	70%	15	23	+37
12:00 PM	38%	4	13%	1	75%	3	5%	2	45%	9	19	+41
1:00 PM	38%	4	19%	1	100%	4	30%	14	0%	0	23	+37
2:00 PM	41%	4	25%	1	100%	4	60%	27	0%	0	36	+24
3:00 PM	39%	4	25%	1	100%	4	60%	27	0%	0	36	+24
4:00 PM	32%	4	19%	1	75%	3	15%	7	0%	0	15	+45
5:00 PM	23%	3	13%	1	50%	2	0%	0	0%	0	6	+54
6:00 PM	23%	3	0%	0	0%	0	0%	0	0%	0	3	+57
7:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58
8:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58
9:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58
10:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58
11:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58
12:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58

[1] Hourly weekend parking profiles for Rancho Los Cerritos administration/volunteer uses are based on the Urban Lan Institute (ULI) *Shared Parking* Publication. The parking profiles for Rancho staff visitors, general tours, and classes/lectures are based on existing operations.

[2] Parking rates used to forecast the parking demands are based on average vehicles occupancies observed at the Rancho and LLG recommendations.

[3] Proposed parking supply of 60 spaces consists of the 24 spaces proposed in the on-site parking lots and 36 curbside spaces on Virginia Road. north of the Virginia Country Club Driveway. Note that approximately 90 curbside spaces are provided on Virginia Road, south of the Virginia Country Club Driveway.

Special Events and Public Programs at Rancho Los Cerritos Historic Site during 1999

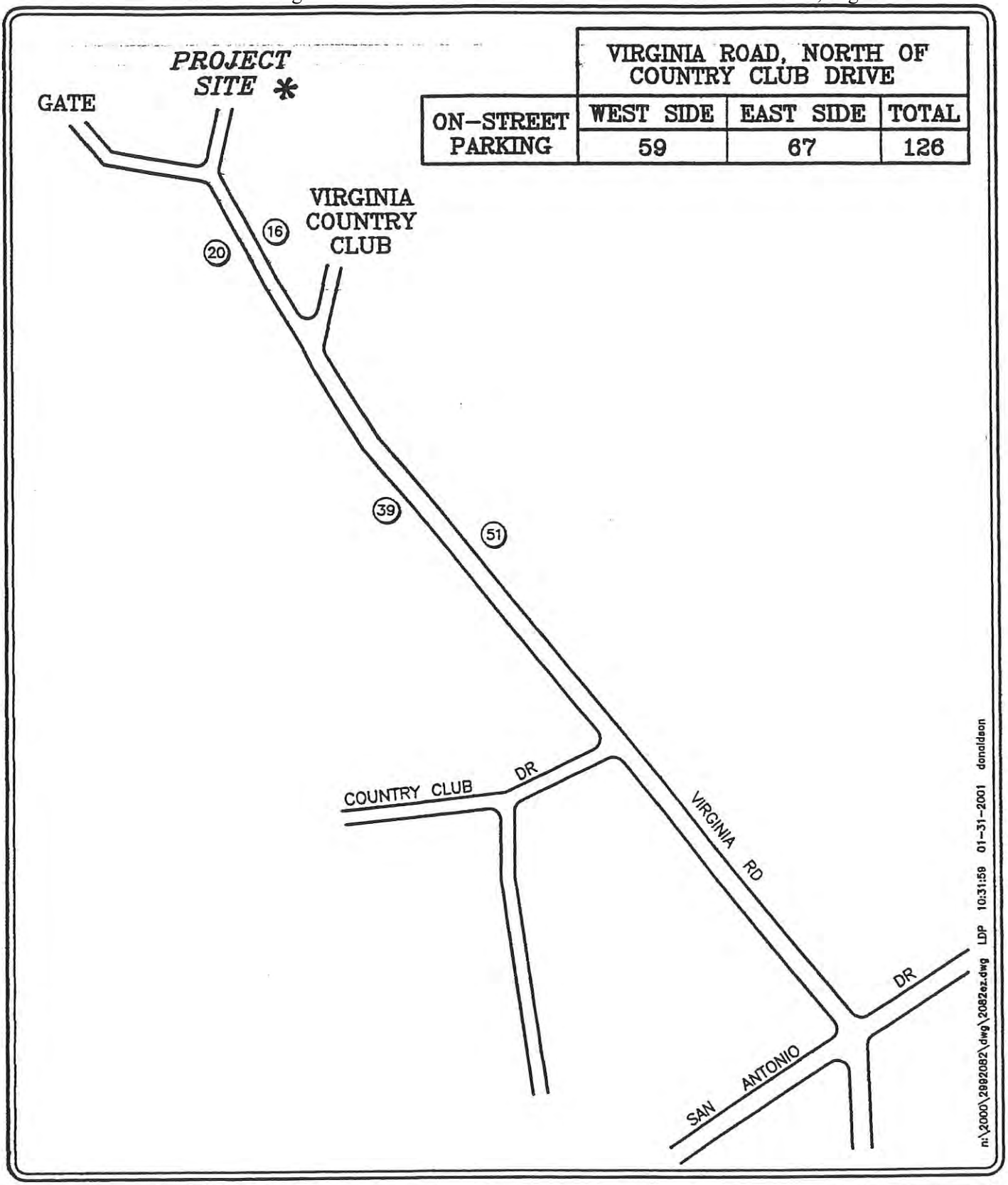
Date	Program	Times	Public Attendance
January 9	Lecture series, pt. 1 – gold rush	10-noon	21
January 30	Victorian Manners workshop	10-noon	53
February 13	Lecture series, pt. 2 – gold rush	10-noon	47
March 13	Lecture series, pt. 3 – gold rush	10-noon	21
March 23	Tea with Margaret Bixby living history	2:30-4 pm	46
April 10	Lecture series, pt. 4 – gold rush	10-noon	22
May 8	RLC Players -- Living history performance	5:30-7:30 pm	80
June 12	New Citizens Welcome	11 am – 2 pm	250
June 17	Third Thursday Summer Evenings – concert, picnicking and tours	5-7:30 pm	110
July 8	Children's Choice	1-4 pm	167
July 15	Third Thursday Summer Evenings – concert, picnicking and tours	5-7:30 pm	141
July 22	Children's Choice	1-4 pm	337
August 8	Mud Mania	12:30-4:30	570 (& 80 volunteers)
August 12	Children's Choice	1-4 pm	140
August 19	Third Thursday Summer Evenings – concert, picnicking and tours	5-7:30 pm	264
August 26	Children's Choice	1-4 pm	303
September 12	Chautauqua performance	5:30-7:30 pm	80
October 9	Antique Appraisal Affaire	10 am – 3 pm	286
November 13	Games Workshop	10 am – noon	9
December 3	Christmas Candlelight Tours	6-9:30 pm	220 (& 50 volunteers)
December 3	Christmas Candlelight Tours	6-9:30 pm	250 (& 50 volunteers)
December 12	Christmas Open House	1-4 pm	440

Programs and Site Use at Rancho Los Cerritos Historic Site in 2000

Date	Program	Times	Area(s) used
January 8	Preservation Workshop, pt. 1	10 am – noon	Sunporch
February 12	Preservation Workshop, pt. 2	10 am – noon	Sunporch
March 11	Preservation Workshop, pt. 3	10 am – noon	Sunporch
April 8	Preservation Workshop, pt 4	10 am – noon	Sunporch
May 13	Restoration Fair	12:30-4:30 pm	Backyard, courtyard

Exhibit A

Date	Program	Times	Area(s) used
June 15	Summer Concert Series	5-7:30 pm	Backyard
June 17	New Citizens Welcome	11:30 am – 1:30 pm	Backyard
July 20	Summer Concert Series	5-7:30 pm	Backyard
August 13	Mud Mania	12:30 – 4:30 pm	Backyard
August 17	Summer Concert Series	5-7:30 pm	Backyard
September 9	Sesquicentennial Program	5-9 pm	Backyard, courtyard
October 14	Antiques Appraisal Affaire	10 am – 2 pm	Backyard
December 3	Christmas Open House	1-4 pm	Backyard, courtyard, house
December 8	Christmas Candlelight Tours	6-9:30 pm	House, courtyard, backyard
December 9	Christmas Candlelight Tours	6-9:30 pm	House, courtyard, backyard
Wednesday thru Sunday, year-round	House and garden tours	1-5 pm	House, courtyard, backyard
Wednesdays & Thursdays – October - June	Adobe Days Revisited 4th grade school program	9:30-noon	House, courtyard, backyard
1st Sunday/ month	Guided garden tours	2 pm	Backyard, courtyard
July 4	Picnic for members	6-10 pm	Backyard
December TBA	Holiday Open House for members	5:30-7:30 pm	Sunporch
1st Mondays	Friends of RLC board meeting	7-9 pm	Library
2nd Thursdays	RLC Foundation board meeting	5:30-7 pm	Library
1st Mondays	Garden committee workday	9:30 – noon	Grounds
2nd Mondays	Garden committee crafts day	9:30 – noon	Library
2nd Tuesdays	Curatorial committee meeting	6 – 8:30 pm	Library
3rd Tuesdays	Curatorial committee workday	9:30 – noon	House
Thursdays, September-October	School docent training	9:30 am – 12:30 pm	House
Wednesdays, February-April	Docent training	7 – 9 pm	House
2nd Saturday in June	Friends of RLC Annual Meeting	9:30 am – noon	Backyard



	VIRGINIA ROAD, NORTH OF COUNTRY CLUB DRIVE		
ON-STREET PARKING	WEST SIDE	EAST SIDE	TOTAL
	59	67	126

N NO SCALE

KEY

(#) = APPROXIMATE NUMBER OF ON-STREET PARKING SPACES (CALCULATED AT 22' PER SPACE)

LINSCOTT LAW & GREENSPAN ENGINEERS

VIRGINIA ROAD ON-STREET PARKING
RANCHO LOS CERRITOS, LONG BEACH

Exhibit B

LINSCOTT LAW & GREENSPAN
ENGINEERS

SPECIAL EVENTS PARKING DEMAND PROJECTIONS
Rancho Los Cerritos Historic Ranch *Master Plan Implementation*

(1) Rancho Los Cerritos Historic Ranch Special Event	(2) Schedule of Event *(Peak on-site Accumulation)*	(3) Maximum Event Attendance (# of attendees)	(4) AverageVehicle Occupancy (attendees/ vehicle)	(5) Event Staff (# employees)	(6) Volunteer Support (# volunteers)	(7) Special Event Parking Demand Ratios	(8) # of Spaces Required Attendees	(9) Staff / Volunteers	(10) Total
Restoration Fair	Saturday: 12:30 PM to 4:30 PM *(2:00 PM)*	300	2	6	20	1 space/2 attendees plus 1 space/staff-volunteer	150	26	176
New Citizens Welcome	Weekday: 11:30 AM to 1:30 PM *(12:00 PM)*	300	3	4	12	1 space/3 attendees plus 1 space/staff-volunteer	100	16	116
Summer Concert Series	Weeknight: 5:00 PM to 7:30 PM *(6:00 PM)*	250	3	2	1	1 space/3 attendees plus 1 space/staff-volunteer	83	3	86
Mud Mania	Saturday: 12:30 PM to 4:30 PM *(1:30 PM)*	750	4	8	70	1 space/4 attendees plus 1 space/staff-volunteer	188	78	266
Antiques Appraisal Affaire[1]	Saturday: 10:00 AM to 2:00 PM *(10:30 AM)*	100	2	8	30	1 space/2 attendees plus 1 space/staff-volunteer	50	38	88
Christmas Candelight Tours (2 days)[1]	Friday/Saturday: 6:30 PM to 9:30 PM *(7:15 PM)*	100	3	8	35	1 space/3 attendees plus 1 space/staff-volunteer	33	43	76
Christmas Open House	Sunday: 1:00 PM to 4:00 PM *(1:30 PM)*	600	4	8	20	1 space/4 attendees plus 1 space/staff-volunteer	150	28	178
Foundation Fund Raiser	Saturday: 6:30 PM to 9:30 PM *(7:00 PM)*	300	2	4	16	1 space/2 attendees plus 1 space/staff-volunteer	150	20	170

[1] This special events has a maximum event attendance of 300 persons,but only 100 persons are on-site at any one time (Source: Rancho Los Cerritos Staff).

Table 14

Mitigation Measures:

1. "No Parking" signs shall be installed on Virginia Drive, beginning just north of the Rancho's driveway and ending at the residential gate.

2. The Long Beach Parks, Recreation, and Marine Department, shall investigate what off-site parking lots are available for their use during special public events and enter into an agreement with the property owner to ensure that parking intrusion in the adjacent residential neighborhoods is kept to a minimum.

3. The Long Beach Parks, Recreation, and Marine Department shall investigate the possibility of acquiring property in the immediate vicinity for additional parking for the Rancho.

4. School buses may not idle while parked.

5. Applicant must submit an off-site parking plan for special public events to the satisfaction of the Director of Public Works.

Unavoidable Adverse Impacts:

The proposed Rancho project does not have adequate on-site parking as required by the Long Beach Zoning Ordinance for daily peak period operation or for special public events. This significant adverse impact will require the adoption of "Overriding Considerations" prior to approval of the project.

An off-site parking lot with a signed lease agreement and deed restriction as set forth in Title 21, Section 21.41.222 of the Long Beach Municipal Code, would be necessary to mitigate the significance of this impact.

Cumulative Impacts:

None are anticipated.

XIV. UTILITIES

Existing Setting:

The Rancho is fully served by utilities. The Water Department indicates currently adequately served for potable water and sewer system.

Anticipated Impacts:

Utilities are adequate to serve the site after proposed build-out of the Master Plan. The Fire Department indicated that the capacity was adequate. The additional information was provided and reviewed, and Fire Protection has given their preliminary approval to the Project as presented in schematics. The Los Angeles County Sanitation District also indicates that there are no impacts anticipated.

Mitigation Measures:

Adverse impacts are not anticipated; therefore, no mitigation measures are proposed.

Unavoidable Adverse Impacts:

None are anticipated.

Cumulative Impacts:

None are anticipated.

SECTION 7

ALTERNATIVES

The California Environmental Quality Act (CEQA), in Article 9, Section 14126(d), requires that all Environmental Impact Reports include a discussion and comparison of potential alternatives to the proposed project that could feasibly achieve similar objectives. The discussion and analysis should focus on potential alternatives that may be able to reduce some or all of the significant adverse impacts associated with the proposed project to a level of insignificance.

This section examines feasible alternatives to the proposed project.

Alternative 1: No project

Alternative 2: Increased on-site parking

Alternative 3: Partial Project

The above alternatives are discussed in detail in the following sections. The sections compare the impacts of the alternatives to those that are anticipated to result from implementation of the proposed project for resource categories where there is a substantial difference. This comparison is accomplished using the term "increased" in reference to impacts that will be greater or more negative than the proposed project, and the term "decreased" in reference to impacts that will be more beneficial or less negative than the proposal. Some impacts may be both positive and negative relative to the proposed project, which are referenced as "mixed", while others may be basically the "same" as the proposed project.

Article 9, Section 15126.6 of the CEQA Guidelines requires that:

> "...alternative projects include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects."

Alternative 1: The following alternatives have been selected as required by CEQA. The "no project" alternative is required by Section 15126.6(e).

Alternative 2: The "increased on-site parking" alternative was selected because the proposed project's on-site parking is inadequate. This inadequate condition will exist during the Rancho's special events and is the only significant environmental impact created by the Master Plan. For this reason, an "increased on-site parking alternative" will enable the decision makers to understand the relationship between on-site parking requirements and the cultural and educational objectives established by the proposed project's Master Plan.

Alternative 3: The "partial project" alternative was selected because it will partially effect the basic cultural and educational goals of the Master Plan. However, the significant environmental impact of inadequate on-site parking will still exist.

An "alternative location" alternative will not be discussed because it is infeasible due to the very nature of the project. The land itself is the last of the remaining two ranchos, Rancho Los Cerritos and Rancho Los Alamitos. These ranchos were the precursors to Long Beach development. Moving the project to another site would totally defeat the cultural and educational experience that is the primary purpose of the Rancho Los Cerritos Master Plan.

Alternative 1 – No Project

CEQA requires that a "No Project" alternative be discussed. This alternative considers what the environmental impact would be of leaving the site in its present condition. Under this scenario, the proposed project would not be constructed. The Master Plan would not be implemented. Typically the "No Project" alternative will not result in any environmental impacts since no construction is involved.

Transportation/Traffic

Parking: Currently, Rancho Los Cerritos provides 34 parking spaces for use by employees, visitors, tour attendees and docents. During large and medium scales special events, the on-site parking lot is used primarily for event attendees and disabled persons parking. Rancho staff and event volunteers park their vehicles off-site during special events.

Parking spaces at Rancho Los Cerritos are "grandfathered" as legally non-conforming because it was built prior to current parking standards.

Under a "no project" scenario, the Rancho would continue to have 34 spaces. However, visitors to the Rancho will continue to park on Virginia Road because current on-site parking is inadequate for existing activities and special events.

Level of Impact Compared to the Proposed Project: Same

Cultural Resources

The no project alternative would continue the existing situation without meeting the objectives of the Master Plan. The primary objectives that would not be met are:

1. Conserve those areas and characteristics of the Rancho site that remain intact from the historic time periods;
2. Restore and maintain the remainder of the site to reflect the general image and character of the past; and
3. Preserve the structure and grounds of Rancho Los Cerritos and interpret the relationship of the Rancho's diverse peoples to the development of the Long Beach area.

Level of Impact Compared to the Proposed Project: Increased

Alternative 2 – Increased On-Site Parking

Existing
This alternative consists of providing more parking on-site. Currently there are 34 spaces on-site. Ten (10) of these spaces would be removed by the proposed Rancho Los Cerritos Master Plan. Currently, there is a parking lot located on the west side of the Rancho property that provides parking. This parking lot would be removed and the Visitor's Center will be constructed. The lot will continue to provide approximately six (6) parking spaces, primarily large disabled spaces. The remainder of that parking lot will be open-space.

Proposed in Alternative 2

In Alternative 2 the western parking lot would not be eliminated. As a result, the Visitor's Center would not be built. To provide approximately 15 additional parking spaces on the site, the area north of the Ranch House could be paved and striped. However, this is the proposed site for the Barns, which could not be reconstructed if the area is turned into a parking lot.

Alternative 2 would increase the current parking by approximately 15 parking spaces.

Transportation/Traffic

This alternative would reduce the number of on street parking required by the Rancho, but would prevent the construction of a Visitor's Center and the reconstruction of the Barn.

The increased on-site parking would be adequate to accommodate future daily peak parking requirements under the Master Plan. However, it would still be inadequate for special events, which will continue to require utilization of on-street parking on Virginia Road.

Level of Impact Compared to the Proposed Project: Same

Noise

Increased on-site parking would increase the amount of noise experienced by the adjacent residential uses. The northern parking lot would be within 50 feet of the adjacent residences to the north. In addition, a paved surface leading from the entrance of the Rancho past the Ranch House would be required to move cars through the lot to the northern parking lot.

Parking on Virginia Road is preferable to on-site parking because there are no adjacent residential uses to Virginia Road. It is surrounded by open space golf course.

Level of Impact Compared to the Proposed Project: Increased

Cultural Resources

Under Alternative 2, there would be no construction of the Visitor's Center or reconstruction of the Barn. These buildings are necessary to facilitate the goals and objectives of the Master Plan. If they are not constructed the following objectives will not be met:

1. Conserve those areas and characteristics of the Rancho site that remain intact from the historic time periods;
2. Restore and maintain the remainder of the site to reflect the general image and character of the past; and
3. Preserve the structure and grounds of Rancho Los Cerritos and interpret the relationship of the Rancho's diverse peoples to the development of the Long Beach area.

Level of Impact Compared to the Proposed Project Increased

Alternative 3 – Partial Project

This alternative assumes that only part of the proposed project be built. In this case the all of the project improvements would be implanted except for reconstructing the barns complex and barnyard.

Under Alternative 3 the Rancho would continue to keep staff offices in the Ranch House. In addition, they would continue to have to have public and educational assembly areas in the courtyard area of the Ranch House or outside on open air picnic benches.

Transportation/Traffic

Trip generation and the need for parking are based on expected growth over the next 25 years. The increase in visitors to the Rancho would be the same with or without the Barns Complex.

From a project operations basis vehicular trips generated by the Rancho at build out would be the same.

Level of Impact Compared to the Proposed Project: Same

Cultural Resources

The elimination of the Barns Complex will not allow the removal of staff offices from the Ranch House. This means that the part of the Ranch House that currently houses staff offices would not be available to be opened up to the public.

One of the cultural goals of the Rancho Los Cerritos Master Plan is to enhance the interpretative educational experience of the Rancho. The inability to open the entire Ranch House to tour and event participants will limit the future interpretive experience at the Rancho.

Level of Impact Compared to the Proposed Project: Increased

Noise

The elimination of the reconstruction of the Barns Complex will mean that groups and visitors to the Rancho will continue to congregate in the courtyard area and in the open area to the north of the Ranch House.

As attendance increases, these groups will increase in number, and because they congregate outside, noise will increase and may affect the adjacent neighborhood.

Level of Impact Compared to the Proposed Project: Increased

Environmental Superior Alternative

Each alternative has important environmental consequences. The "No Project" alternative is usually considered to be the environmentally superior choice since no action is taken and consequently there are no environmental impacts. However, in this case, with no Master Plan changes, adverse significant cultural

impacts will be higher because there will be no reconstruction of the Barn, no construction of the Visitor Center, and no construction of the Caretaker's Residence, thus impacting the space available in the Adobe Ranch House

SECTION 8
GROWTH INDUCING IMPACTS

Introduction

Under Article 9, Section 14126(g) of the CEQA Guidelines, all environmental impact reports are required to include a discussion and analysis of the means through which the proposed project could foster population, housing, or related economic growth, whether directly or indirectly, in the surrounding environment. This analysis must also discuss the characteristics of projects that may encourage and facilitate other activities, which could significantly affect the environment. It must not be assumed that growth in any area is necessarily beneficial detrimental, or of little significance to the environment.

In general, a proposed project may foster economic, population, housing, or related growth in a geographic area if it meets any one of the three criteria identified below:

1. Generates economic growth or expansion, either directly or indirectly (e.g., changes in revenue base, employment expansion, expansion of construction activity).

2. Establishes a precedent-setting action (e.g., an innovation, radical change in zoning or general plan amendment approval).

3. Develops or encroaches upon an isolated or adjacent area of open space (being distinct from an "infill" project being developed in an urbanized and build-out environment).

Should a project meet any one of the criteria listed above, it can be considered as growth inducing. The potential growth inducing impacts of the proposed project are evaluated below with regard to the three growth-inducing criteria listed above.

Economic Growth

Development of the project will not generate increased revenue or employment.

Precedent Setting Action

The project is the final phase of the Master Plan.

Open Space

The project does not encroach upon open space.

Conclusion

The proposal is not growth inducing.

SECTION 9

ORGANIZATIONS AND PERSONS CONSULTED

AGENCIES CONSULTED:

City of Long Beach

Community Development Department
Fire Department
Gas Department
Parks, Recreation and Marine Department
Planning and Building Department
Police Department
Public Works Department

Other Agencies

Los Angeles County Sanitation District
South Coast Air Quality Management District
Southern California Association of Governments
State of California Department of Transportation

DOCUMENTATION PREPARATION:

Consultant

Richard Barreto
Linscott, Law and Greenspan
(Traffic and Parking Analysis)

Rancho Los Cerritos Master Plan -- Meetings with Interested Parties

During the master planning process we set up an 18-member Advisory Committee that met periodically with consultants and staff to review recommendations, etc. The group reviewed materials mailed to them and also met as a group on the following dates:

1998: January 16, March 28 (as part of the community workshop), April 10, June 25, July 31
1999: March 25

Advisory Committee members included:

Cheryl Bryan, Friends of Rancho Los Cerritos
Dennis Eschen, Parks, Recreation & Marine
Sandra Gibson, Public Corporation for the Arts
Ed Killingsworth, FAIA
Ruthann Lehrer, LB Neighborhood & Preservation Officer
Ed Lovell, ASLA
Linda Mehlbrech, LBUSD Teacher Resource Center
Bob Cordoza, NUVIS (landscape architecture)
Dr. William Marmion, Recreation Commission & retired LBUSD
Margie Newell, Friends of Rancho Los Cerritos
Holly Carpenter, Junior League of Long Beach
Jorge Pardo, Public Corporation for the Arts
Dr. Daniel Wegner, CSULB Recreation and Leisure Studies
Dr. Dorothy Abrahamse, CSULB
Karen Clements, Long Beach Heritage
Dena Deck, Friends of Rancho Los Cerritos
Cordelia Howard, LB Public Library
Jill Rosenberg, realtor

We held an all-day community workshop on March 28, 1998 with about 70 invited guests and the Master Plan Advisory Committee (above) and key board members and City staff including Bob Howard (inspection). Guests included representatives from

- Long Beach Heritage (including Patti Moore, Charlotte Mitchell, Nancy Latimer, Peter Devereaux)
- local historic sites (Nancy Mendez & Susan Doniger—State Parks, Karen Wade—Homestead Museum)
- Historical Society of Long Beach (Barbara Barnes, Julie Bartolotto, Kaye Briegel)
- Cultural Heritage Commissions (Laurell Howat, Stan Poe, Dan Pressburg, Bill Avery, Mike Burrows)
- Public Corporation for the Arts
- Junior League of Long Beach
- Friends of Rancho Los Cerritos
- Rancho Los Cerritos Foundation
- Several families from the eight neighbors who live below the Rancho attended. (William & Terry VanNuys, Jeff & Kathryn Wayman, Ed Killingsworth)

Rancho Los Cerritos Master Plan -- Meetings with Interested Parties, p. 2

In addition, consultants, foundation board members and/or staff met once or twice each with the following individuals or organizations for input:

Date	Group/Occasion	Attendees
Spring 1998	Virginia Country Club	Jeff Schlicht, Manager
April 29, 1998	Neighbors on Virginia Road below Rancho	William and Terry VanNuys, Steve Salyer, Ed Killingsworth, Mr. and Mrs. Wayman met with RLCF board members Jean Bixby Smith, Sheri Beebe, Barbara Bixby Blackwell, Jack Dilday (Also invited but unable to attend: Benederets, Campbells)
June 14, 1998	Open House to 90807 zipcodes	About 70 attendees from immediate neighborhood; introduced master plan
June 17, 1998	Police Department	Sergeant Steve Filippini, Lieutenant Kym Waranus
June 17, 1998	Fire Department, Bureau of Fire Protection	Captain Hank Teran
June 17, 1998	ADA Compliance	Dolores Barrows, Angel Fuertes (Engineering), L.G. Ng (City' ADA consultant)
June 17, 1998	State Historic Preservation Office	Cherilyn Widell, SHP Officer
July 11, 1998	Public Open House	Over 110 attendees from greater Long Beach area; included Steve Elliott and Ken Rutherford who live below Rancho on Virginia
August 20, 1998	Recreation Commission	Commissioners, PR&M Executive Staff
Summer 1998 (don't recall date)	More Virginia Road neighbors (below the Rancho)	Toured RLC with Kit Paigne and Steve Salyer; discussed master plan
February 23, 1999	Commission on Disabilities	Dolores Barrows and commissioners
March 3, 1999	LB Cultural Heritage Commission, informational presentation	Ruthann Lehrer, LBH commissioners
May 26, 1999	Virginia Country Club	Board of Directors
Fall 2000 (don't recall date)	ADA Compliance	Dora Jones, two members of Disability Commission
October 17, 2001	Virginia Road neighbors (below the Rancho) and Virginia Country Club	Killingsworth, Campbell, VanNuys, Rutherford, Salyers, VaCC manager Joe Furlow with Foundation board members; remaining four neighbors received follow-up letter/ packets)

SECTION 10

MITIGATION MONITORING PLAN

AESTHETICS

1. A dense vegetation buffer shall be installed along the entire perimeter of the site and along both sides of the driveway entrance. The buffer shall consist of evergreen trees and large shrubs. Minimum installation size shall be 15 gallon and shall be spaced no greater than 6' on center.

   Timing: Show on Plans
   Enforcement: Zoning Division

2. To help insure that the adjacent residential residents' scenic vista of the Rancho is not significantly impacted; all new structures shall conform with Chapter 21.34, Institutional District , "setback" and "building height" requirements the Long Beach Municipal Code.

   The "setback" requirements for the Visitor Center, Barn, and Caretaker's Unit are:

1. Front Yard	20 feet
2. Side/Rear Yard	15 feet (when adjoining a residential district)

   The maximum height allowed is:

1. Principal Structure (Visitor Center and Barn)	30 feet, or 1 foot for each 2 feet of distance from abutting residential district
2. Accessory Structure (Caretaker Residence)	15 feet

   Timing: Show on Plans
   Enforcement: Zoning Division

AIR QUALITY

The following air quality measures are required during construction:

1. Install dust containment screens along the western, northern and southern limits of construction.

2. Suspend use of all construction equipment operations during second stage smog alerts.

For daily forecast, call (800) 242-4022 (Los Angeles and Orange Counties).

3. Configure construction parking to minimize traffic interference.

4. Provide temporary traffic control during all phases of construction activities to improve traffic flow (e.g., flag person).

5. Schedule construction activities that affect traffic flow to off-peak hours (e.g., between 10:00 a.m. and 3:00 p.m.).

6. Providing dedicated turn lanes for movement of construction trucks and equipment on- and off-site.

7. Replace groundcover in disturbed areas as quickly as possible.

8. Enclose, cover, water twice daily, or apply non-toxic soil binders according to manufacturers' specifications, to exposed piles (i.e., gravel, sand, dirt) with 5% or greater silt content.

9. Water active sites at least twice daily.

10. Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph.

11. Monitor for particulate emissions according to District-specified procedures. For information, call (714) 396-3600.

12. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer) in accordance with the requirements of CVC Section 23114.

13. Sweep streets at the end of the day if visible soil material is carried onto adjacent public paved roads (recommend water sweepers with reclaimed water).

14. Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each rip.

Timing: During Construction
Enforcement: Building Bureau

BIOLOGICAL RESOURCES

1. If construction activity occurs during nesting season, a qualified ornithologist will locate active bird nests and construction activities shall be limited to areas where no nest destruction or damage can occur, or appropriate permits will be obtained from the U.S. Fish and Wildlife Service.

   Timing: Prior to construction
   Enforcement: Building Bureau

CULTURAL RESOURCES

1. The project is required to conform to the U.S. Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings adopted by the July 1999 Rancho Los Cerritos Master Plan. (see Appendix A.)

   Timing: Prior to building permits
   Enforcement: Cultural Heritage Commission

2. The project must receive a Certificate of Appropriateness from the Long Beach Cultural Heritage Commission.

   Timing: Prior to building permits
   Enforcement: Cultural Heritage Commission

3. A data recovery plan, which makes provision for adequately recovering the scientifically consequential information from and about the historical resource, shall be prepared and adopted prior to any excavation being undertaken

   Timing: Prior to grading permits
   Enforcement: Building Bureau

4. The applicant shall select an archaeologist to monitor all project grading and excavation activities, to conduct test excavations (if appropriate) and to conduct salvage excavations if necessary. A Native American monitor, selected by the applicant, shall also monitor the above-described activities during the development of the proposed project.

4. During all subsurface grading/excavation, archaeological monitoring shall be required. A physical inspection of any and all suspected archaeological deposits will be made by the project archaeologist and Native American monitor prior to their removal through grading, or,

alternatively, their further mitigation through scientific archaeological methods such as described below:

6. If archaeological sites, features or artifacts are encountered by the project Archaeologist and Native American monitor, they shall be formally recorded by the project archaeologist. Such recording will involve measuring, mapping, and photography and description, which can be made on the basis of visual inspection.

7. If potentially unique resources are suspected as a result of the monitoring program described above, the project archaeologist shall conduct a subsurface test excavation program in order to determine the presence or absence of such resources on the project site, and to reduce the likelihood of destruction of any significant archaeological resources. An archaeological test excavation should determine the level of significance of any remaining archaeological deposits, their vertical depth and horizontal extent, and provide an estimate of archaeological site volume necessary for the determination of an adequate salvage sample, should such be required.

8. If archaeological test excavations described above reveal archaeological resources (sites, features, or artifacts) deemed unique (as defined by the provisions of California Public Resources Code Section 21083.2(g) by the project archaeological and native American monitor, those resources to be disturbed shall be addressed through scientific archaeological salvage excavations subject to the provisions and limitations of California Public Resources Code Section 21083 (c), (d), and (e)(1). Any salvage excavation shall be conducted pursuant to an excavation plan prepared in accordance with Appendix K to the State CEQA Guidelines Archaeological salvage excavations normally involve the complete excavation of any intact features (burials, caches, etc) which might be encountered, plus the scientific excavation of a predetermined salvage sample. This sample will be a percentage of the total archaeological site volume already estimated from the producing archaeological test program. The timing of all scientific archaeological excavations shall be determined by the applicant in consultation with the project archaeological and Native American monitor, taking into account the applicant's construction schedule.

9. If human burials or human remains are encountered through any of the above activities, all work shall cease in the immediate area until it can be determined whether or not such remains are those of native American Indians. If this proves to be the case, notification shall be given in accordance with all applicable laws, including California Public Resources Code Section 5097.98 and Appendix K to the State CEQA Guidelines.

10. All historic object(s) to be removed shall be documented with black and white archival photographs showing all views plus significant construction detail, keyed to the site. This documentation shall include large format photography and measured drawings. The photographs and plans prepared as mitigation shall be submitted to the City of Long Beach Planning and Building Department for inclusion in their architectural and cultural resources surveys, with copies to the Rancho's permanent archives.

    Timing: As specified
    Enforcement: Cultural Heritage Commission

GEOLOGY & SOILS

1. Development and construction of the project shall conform to the seismic design provisions of the current Uniform Building Code.

    Timing: Show on Plans
    Enforcement: Building Bureau

HYDROLOGY

1. Applicant shall submit an erosion protection plan to the Director of Planning and Building.

    Timing: Prior to grading
    Enforcement: Building Bureau

2. Virginia Road shall be kept "broom clean" during construction.

    Timing: During Construction
    Enforcement: Building Bureau

3. A complete grading and drainage plan shall be submitted to the Long Beach Director of Public Works and the Los Angeles County Public Works Department.

    Timing: Prior to Construction
    Enforcement: Building Bureau

5. Applicant shall obtain a National Pollution Discharge Elimination System permit prior to the release of building permits.

    Timing: Prior to building permits
    Enforcement: Building Bureau

LAND USE AND PLANNING

1. All construction equipment and materials shall be stored on-site.

2. All construction workers shall park their vehicles on-site.

   Timing: During Construction
   Enforcement: Building Bureau

NOISE

1. Construction activities are limited to the hours between 7am and 7 pm.

   Timing: During Construction
   Enforcement: Building Bureau

2. All construction equipment operating on-site shall have properly operating mufflers.

   Timing: During Construction
   Enforcement: Building Bureau

3. Equipment and materials staging shall be as far from noise-sensitive uses as is practical, consistent with construction requirements.

   Timing: On-going
   Enforcement: Building Bureau

4. Electrically powered equipment shall be used instead of equipment driven by internal combustion engines where feasible.

   Timing: On-going
   Enforcement: Building Bureau

5. Siting semi-stationary heavy equipment shall be as far from noise-sensitive uses as is practical.

   Timing: On-going
   Enforcement: Building Bureau

TRANSPORTATION

1. "No Parking" signs shall be installed on Virginia Drive, beginning just north of the Rancho's driveway and ending at the residential gate.

   Timing: Prior to Certificate of Occupancy
   Enforcement: Public Works

2. The Long Beach Parks, Recreation, and Marine Department, shall investigate what off-site parking lots are available for their use during special public events and enter into an agreement with the property owner to ensure that parking intrusion in the adjacent residential neighborhoods is kept to a minimum.

   Timing: On-going
   Enforcement: Zoning Division

3. The Long Beach Parks, Recreation, and Marine Department shall investigate the possibility of acquiring property in the immediate vicinity for additional parking for the Rancho.

   Timing: On-going
   Enforcement: Zoning Division

4. School buses may not idle while parked.

   Timing: On-going
   Enforcement: Zoning Division

5. Applicant must submit an off-site parking plan for special public events to the satisfaction of the Director of Public Works.

   Timing: On-going
   Enforcement: Public Works



Entrance



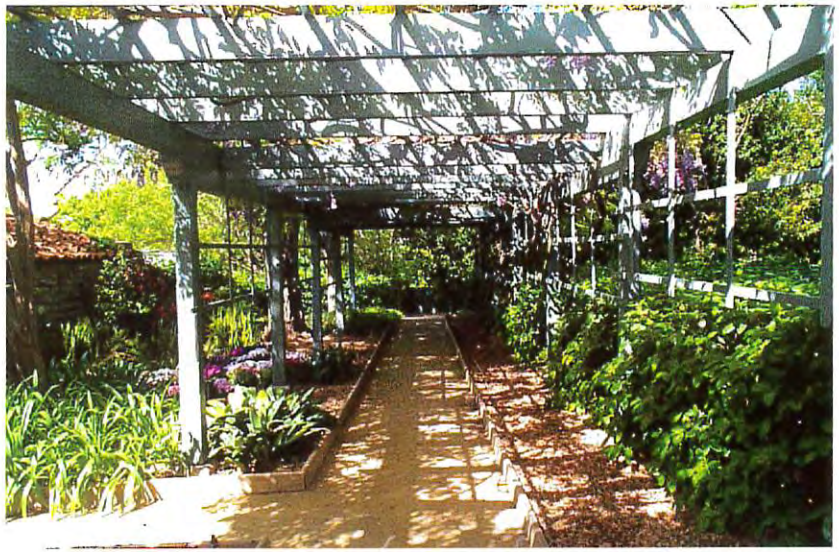
Arroyo



Abobe Ranch House Room



West Path



Eastern Arbor



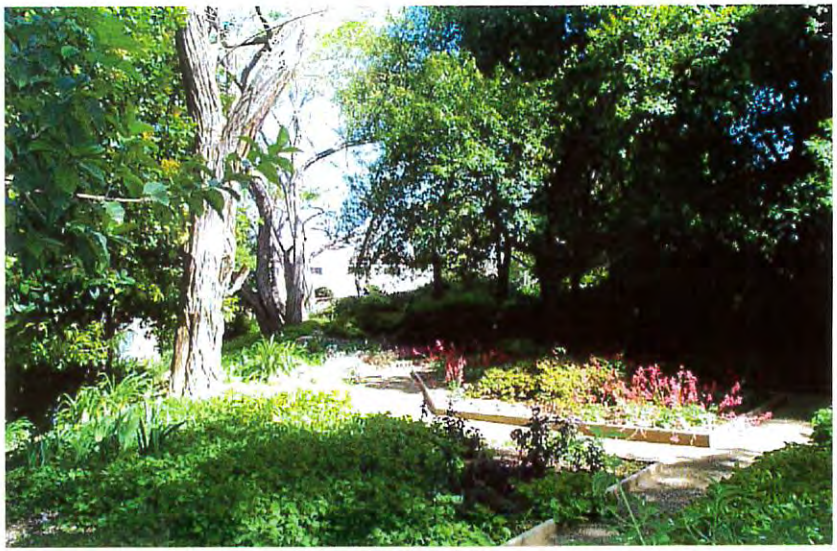
Ranch House Courtyard



Gardens



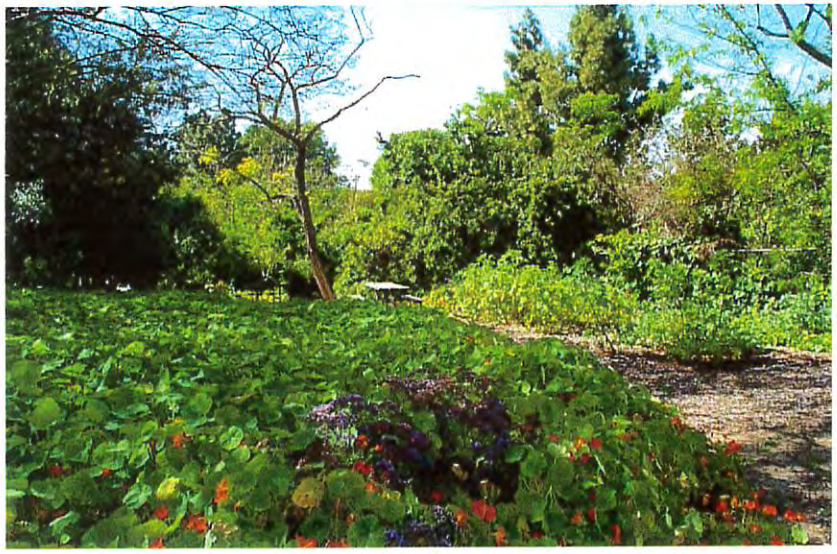
Ranch House Courtyard



Northern Gardens



North East of Ranch House



Picnic Area



North of Ranch House



Eastern Parking Lot



Looking to Eastern Parking Lot



Golf Course



Residential Private Street

VOLUME 2
ENVIRONMENTAL IMPACT REPORT

SCH 99148658

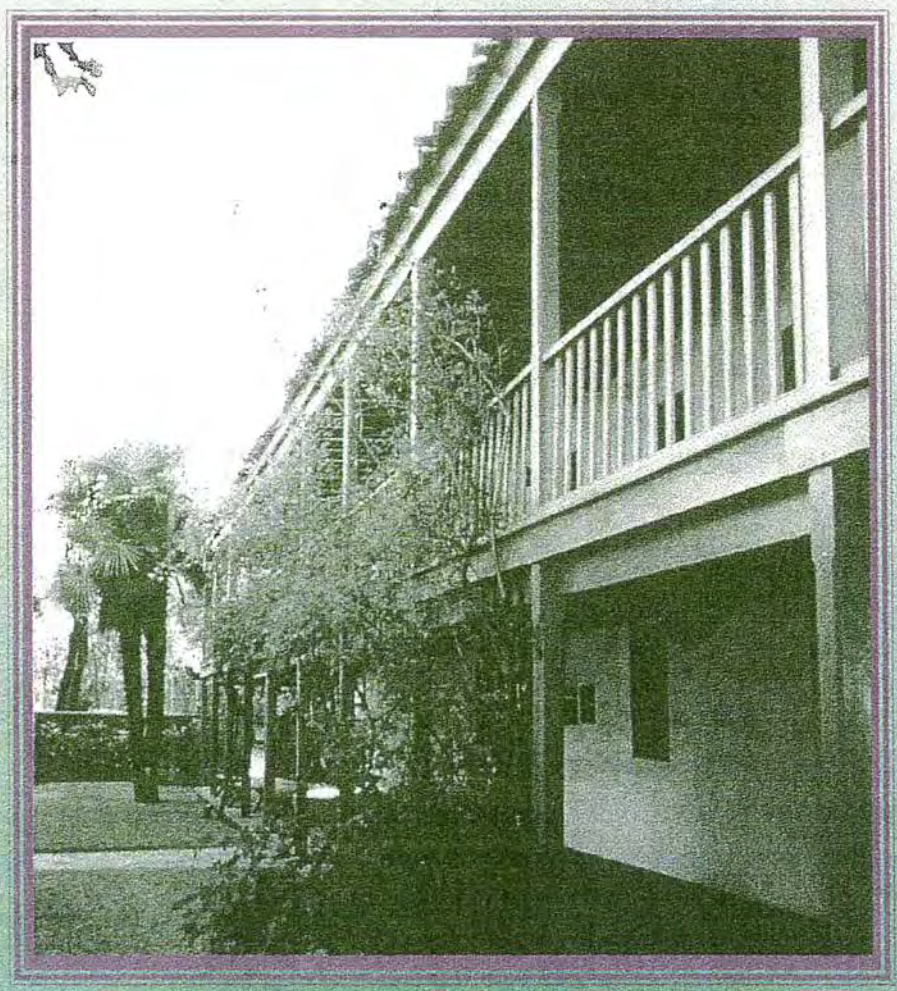


RANCHO LOS CERRITOS MASTER PLAN PROJECT

Prepared by:

Community and Environmental Planning Division
Department of Planning and Building
January 2002

RANCHO LOS CERRITOS



MASTER PLAN

Prepared for:
The Rancho Los Cerritos Foundation

Prepared by:
Architect Milford Wayne Donaldson, FAIA

July 1999

APPENDIX A

SECTION ONE
INTRODUCTION

ACKNOWLEDGMENTS

FUNDING SUPPORT
Bixby Land Company
Knight Foundation
Spring Street Foundation

RANCHO LOS CERRITOS FOUNDATION BOARD OF DIRECTORS (1998-99)
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Karen Clements, Long Beach Heritage
Dena Deck, Friends of Rancho Los Cerritos
Dennis Eschen, City of Long Beach Parks, Recreation and Marine
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Linda Mehlbrech, Long Beach Unified School District
Margie Newell, Friends of Rancho Los Cerritos
Jorge Pardo, Public Corporation for the Arts
Jill Rosenberg, Real Estate
Dr. Daniel Wegner, California State University Long Beach

FRIENDS OF RANCHO LOS CERRITOS

RALPH S. CRYDER, FORMER DIRECTOR, CITY OF LONG BEACH PARKS, RECREATION AND MARINE

PHIL T. HESTER, DIRECTOR, CITY OF LONG BEACH PARKS, RECREATION AND MARINE

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CHERILYN WYDELL, FORMER STATE HISTORIC PRESERVATION OFFICER

LONG BEACH CULTURAL HERITAGE COMMISSION

RECOGNIZED INDIVIDUALS
Leo Darnasky and Bob Kennedy, Beam Alarm
Hank Teran, Long Beach Fire Department
Sergeant Steve Filippini and Lieutenant Kym Waranu, Long Beach Police Department
Angel Fuertes and Frank Sanchez, Public Works, Engineering Division
Dolores Barrows, Long Beach Department of Human Resources
Pamela Seager, Rancho Los Alamitos Foundation
Randy Jara, Brian Cescolini, Universal Protection Service
L. G. Ng, Americans with Disabilities Act Consultant

CONSULTANT TEAM

The Rancho Los Cerritos Foundation commissioned the architectural and planning firm Architect Milford Wayne Donaldson, FAIA, Inc. to prepare the Master Plan document for the historic Rancho Los Cerritos. Architect Milford Wayne Donaldson, FAIA, Inc. closely collaborated with KTU+A, a landscape architectural firm, who has extensive experience in master planning.

The overall master planning team consisted of:

Architect Milford Wayne Donaldson, FAIA, Inc./Historic Architect
Wayne Donaldson • Eileen Magno
Stuart Sawasaki • Carmen Pauli
Joy Guevara • Sylvia Folk

KTU+A/Landscape Architects/Planners
Michael A. Theilacker • Kurt W. Carlson
Michael Johnston

Historian
Dr. Iris Engstrand

Economic Research Analysts/Marketing Analysts
David Bergman • Shawna Dark

DMc Engineering/Civil Engineering
Dereck McGregor • Neil Morrison

ECM Associates, Inc./Cost Estimator
Sean Fennell • Raymond Murphy

Michael Follin/Interpreter
Michael Follin

The consultant team extends a ***SPECIAL THANKS*** to ***Ellen Calomiris***, Historic Sites Officer, ***Steve Iverson,*** Historical Curator, and ***Marie Barnidge-McIntyre,*** Horticulturist.

This document is the synoptic of the research, analysis and recommendations of the comprehensive master plan program for Rancho Los Cerritos, and may not be reproduced, photographed, or copied in any form without the expressed written consent of the Rancho Los Cerritos Foundation.

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2.2 Historic Overlay/Periods of Significance
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The master plan program of the Rancho Los Cerritos Historic Site, as financed by the Rancho Los Cerritos Foundation, represents the next significant step in enhancing and contributing to the public's understanding, recognition and enjoyment of Long Beach's local and regional history. However, a meaningful historic site will only be successful if the "story" is appropriate to the site, the surrounding region and the contemporary audience. The physical needs for articulating the site's history and meeting visitors' needs must be sensitively addressed and implemented. The preservation, maintenance and management programs must be appropriate, well organized and in complete and efficient operation.

This master plan document for Rancho Los Cerritos Historic Site provides a vision, goals, opportunities and recommendations based upon a thorough analysis of the site's resources and the contributions of the site's occupants to the history of California. All recommendations are consistent with the Secretary of the Interior's *Standards for Rehabilitation*, the State Historical Building Code, the Americans with Disabilities Act, the California Administrative Code (CAC), Title 24, and appropriate National Park Service Preservation Briefs.

Before any major decisions can be made, the existing and available resources had to be assessed. It was essential to carefully examine the total project area and to analyze the existing site conditions. These investigations determined the initial concerns and questions for research that established the historical significance of the site. This information, integrated with the site assessment, planning and maintenance, determined the project's scope and its ultimate objectives.

The research revealed the project's opportunities and options, and identified the optimum preferred plan. This preferred plan sets the path for the proposed ultimate design development. All future work should comply with the preferred plan, whether it be additional planning, maintenance, or the preparation of the interpretive program. It is important to realize that the historic elements must be recognized as the key element in the development of the historic site. Another essential part of any preservation project is the creation and implementation of a comprehensive landscape maintenance plan. Of special concern are the many dynamic features in a historic landscape that are constantly changing, growing and moving. Without an innovative landscape maintenance plan, the distinctive site character, trees, shrubs and transitory features would be lost through the passage of time. The basic task has been to unite all of these considerations into the best emerging plan.

This master plan document has been prepared to address and define the physical design, financial and operational issues and interpretive opportunities for Rancho Los Cerritos.

Section 1 - **Introduction**

1.1 EXECUTIVE SUMMARY

Background

Rancho Los Cerritos is a National, State and Local Historic Landmark owned and operated by the City of Long Beach since 1955 as a public museum and historic site. Built in 1844, the two-story adobe and landscaped grounds echo with the rich history of Spanish, Mexican and American California and the families who helped transform southern California from its ranching beginning to a modern, urban society. As cattle and sheep pastures gave way to development beginning in the late nineteenth century, the cities of Long Beach, Lakewood, Bellflower, Paramount and Signal Hill grew up on the 27,000 acre Rancho. Today the site is open for public tours and offers garden activities, lectures and workshops, family events, school field trips, an active volunteer program and a California History Research Library.

In September, 1997, the Rancho Los Cerritos Foundation contracted with a consultant team led by Architect Milford Wayne Donaldson, FAIA, Inc. to prepare a comprehensive master plan for the Rancho Los Cerritos Historic Site. The plan is designed to serve as a guide for site development and interpretation, and includes sections on structural and landscape restoration, maintenance, educational programming, visitor amenities and staff and collections needs. The plan provides for phased development over a 25-year period, and is estimated to cost between $4.2 and $5.3 million in 1999 dollars.

Opportunities and Constraints

Following a decision approved by the Long Beach City Council in 1993, most alterations made in 1930-31 to the historic adobe and landscaped grounds shall be restored and preserved. However, the interpretive period will cover the years 1840-1940.

All work will follow the Secretary of the Interior's Standards for *Historic Preservation Projects.* Additionally, appropriate Preservation Briefs, the State Historical Building Code and Americans with Disabilities Act requirements will guide work.

The Interpretive Experience

The primary goal of the interpretive plan, based on Rancho Los Cerritios' Mission Statement, is to interpret the relationship of the Rancho's diverse peoples to the development of the greater Long Beach area.

Emphasizing the years from the 1840s-1940s, interpretive programs will focus on three major themes: home, land and economic growth, and cultural diversity. The main interpretive method will involve living history actors who will portray "Visitors from the Past," assuming the role of historic characters and transcending time barriers to share their personal stories with visitors. These stories will reflect different eras, nationalities, cultures, economic activities and social pastimes. Each Visitor from the Past will present a different chapter in the Rancho's history, encouraging repeat visitation to explore additional stories.

Rooms within the historic adobe will be furnished to represent activities and lifestyles from the 1840s, 1870s and 1930s, with visitors progressing through time as they progress through the building. The different period room exhibits will provide a "stage" for interpreters from each of these time periods, and also allow for comparison/contrast tours and exercises.

Other interpretive methods will include videos in the Visitor Center; small changing exhibits; lectures or workshops in the reconstructed nineteenth century barns complex; films; school lessons in the south wing classroom; demonstrations or hands-on activities; theatrical and musical performances; publications; and special events.

Educational Programs

The proposed Interpretive Plan allows the Rancho's popular fourth grade school program, *Adobe Days Revisited*, to continue with some modifications. Interpretive themes and site resources suggest exciting opportunities for new programs that will meet the goals of the History and Social Science Content Standards for the Long Beach Unified School District. Recommendations include an expansion of school programming in grades K-12 and added internship possibilities, as well as the development of Teaching Training Workshops and collaborative projects with local colleges and universities. After-school and summer programs for children will also be developed to provide valuable services for the youth in our community.

Research and Publication

The California History and Research Library plays an important role in the development of Rancho Los Cerritos as a community and educational resource and will remain housed at the site, along with the museum's collection of archival documents and photographs. Students, scholars, volunteers and the general public will be encouraged to use the library for research on the history of California and development of the greater Long Beach area, and efforts will be made to publish new material in scholarly journals or in manuscript form.

Key Physical Changes

Throughout the master planning process, these constraints and needs shaped decision-making:

- Restoration of the historic adobe to the 1930s era.
- Restoration of most of the grounds areas to reflect Cornell's plans.
- Seismic retrofit of the historic adobe to meet current codes.
- Compliance with ADA.
- Upgrades to the security and safety of the site and structures.
- Installation of perimeter landscaping to provide a dense barrier between the site and neighboring properties.

To meet visitor, staff, security and collections needs and best protect existing historic resources, the following recommendations are key to the proposed plan:

- Enhancements to perimeter fence and landscaping to provide a visual buffer.
- Redesign and relandscaping of the entryway at Virginia Road, including signage improvements.
- Removal of the 1980s Spanish-tile Patio and Mexican Courtyard, and restoration of Cornell's orchard.
- Construction of a Visitor Center, based on the pre-1834 Cota Adobe, which provides visitor orientation and houses the Museum Gift Shop, a docent changing area, the volunteer office and public restrooms; includes removal of parking lot and relandscaping of area.

Section 1 - **Introduction**

- Construction of a new Caretaker's residence near the Virginia Road entrance, and removal of the caretaker from the historic adobe.
- Development of staff parking area in the maintenance yard.
- Removal of the Visitor Center from the 1980s garage area, and conversion of this space into a classroom/lecture area.
- Construction of the nineteenth century barns complex and barnyard to house staff offices, archives and collections, additional restrooms, a small kitchen and a public assembly area; and removal of these services from the historic adobe.
- Removal of the activity area from the southeast corner of the back garden and 1980s planted herb garden, and restoration of these areas according to Cornell's plans.
- Removal of the picnic area from the northwest corner of the property, and relandscaping to reflect a native California landscape.
- Construction of a rustic structure to house gardening tools and an exhibit workshop to replace the current trailer.
- Removal of the 1980s public restroom structure.

Time Frame

The Master Plan is divided into three major phases over a 25-year period. These are divided as such: Phase I, 1999-2004; Phase II, 2005-2014; and Phase III, 2015-2024. In 1999, the Foundation will undertake an Environmental Impact Study for the project, then seek approval of the plan from the Parks, Recreation and Marine Director, the Cultural Heritage Commission, the Citizens Advisory Commission on Disabilities, the Recreation Commission, the Planning Commission, and the Long Beach City Council.

Costs and Funding Responsibilities

In 1999 dollars, capital construction is estimated to cost between $4.2 and $5.3 million. This sum does not include amounts for ongoing building and grounds maintenance, increased operational costs and staffing needs, and asbestos and lead paint mitigation measures. Operations costs, including the addition of staff for the new interpretive program, expansion of programs and development of changing exhibits, are also not included in this figure.

It will continue to be the City of Long Beach's responsibility to support maintenance needs, daily operations, seismic retrofit work, security and safety improvements and ADA upgrades for Rancho Los Cerritos. In partnership with the City, the Rancho Los Cerritos Foundation will take the lead in raising private, corporate and foundation funds for restoration, new construction including associated archaeological work, interpretive programming initiatives and other enhancements.

Conclusion

The master plan serves as a guide for site development and interpretation at Rancho Los Cerritos, a National, State and Local Historic Landmark. The Rancho, the place where Long Beach and several neighboring communities began, is in a unique position to serve as a "gateway to the past" and provide visitors with a more complete understanding and connection to the people and forces that shape the southern California region. Implementation of the master plan recommendations will ensure the preservation of this landmark property, while also developing Rancho Los Cerritos as an important educational and community resource.

1.2 Purpose of the Master Plan

Whenever there is a sense of excitement and mystery involved with a historic site, whether occupied or vacant, it is probably because the site resonates with the spirit of past people and events. Excitement about the unknown is heightened with each step of knowledge into lives of those past occupants. The master plan is a critical step in planning an appropriate means for traveling back into the past and understanding the site, buildings and their occupants and how they have changed through the years.

This master plan is a principle document that brings together the findings of the supporting studies and research and presents an integrated and phased implementation program. It illustrates the cultural and natural resources and includes a brief overview of its history and operations that best form the basis of the interpretation. The supporting studies involve the interpretive plan, categories and methods. The design recommendations are inclusive of the site, historic structures, programming and implementation concepts. All of the studies are recommendations of policies, and it is further recommended that a more refined design development of these studies take place before the implementation phase.

The objectives of the master plan are:

A. Identify and gather, within one document, all of the natural and cultural resources and other pertinent data of Rancho Los Cerritos.

B. Determine visitor activities, education programs and events that are compatible with the central theme of the rancho and add to the overall site identity and purpose, and complement the interpretive plan.

C. Make legitimate and responsible decisions that will interpret, restore, preserve and remain faithful to the spirit and character of Rancho Los Cerritos.

D. Produce a complete and logical master plan that establishes a five to twenty-five year phased and prioritized program for defining Rancho Los Cerritos as a well-known historical site for the enjoyment of the public.

Individual components are required as supporting items to help guide and justify the direction of the project. This master plan document is the recommended program. The level of detail in the master plan provides the Rancho Los Cerritos Foundation with a clear and complete list of options and priorities for implementation.

1.3 Rancho Los Cerritos Mission Statement

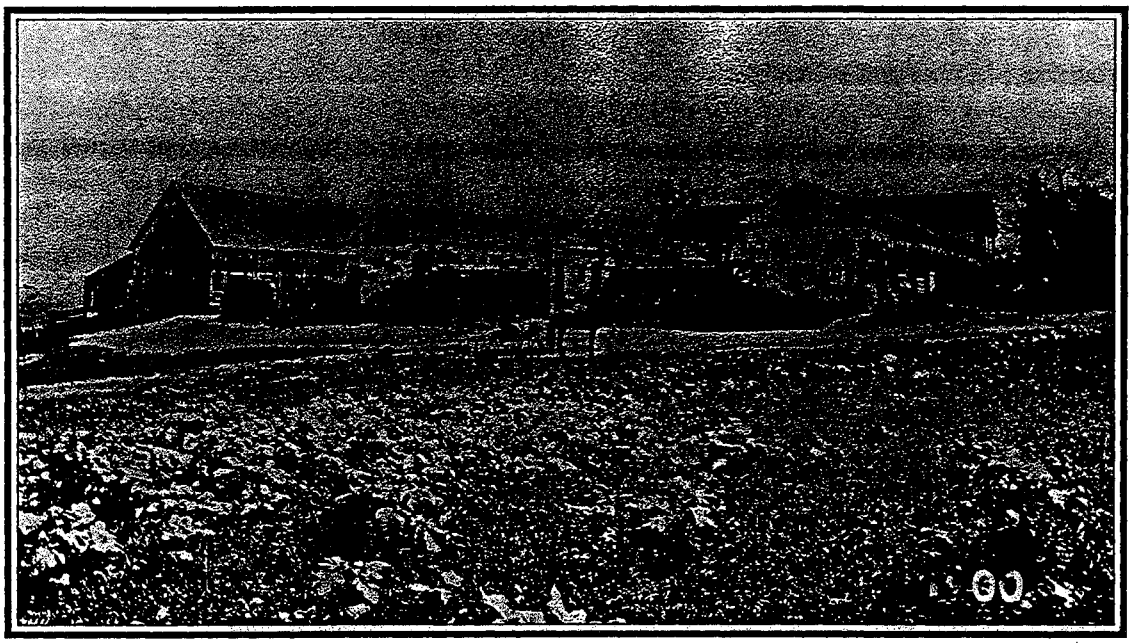
The mission of Rancho Los Cerritos was developed by the NEH colloquium participants in order to provide a clear, succinct purpose for existing. *The mission of Rancho Los Cerritos Historic Site is to restore and preserve the structure and grounds, collect appropriate resources and interpret the relationship of the Rancho's diverse peoples to the development of the Long Beach area.*

Section 1 - **Introduction**

This will be accomplished through a broad spectrum of educational programs, exhibits and publications designed to provide local residents, students and other visitors with an understanding of the forces that shaped the Long Beach region.

To support the Mission Statement, the following objectives have been established:

- Conduct, encourage, produce and share scholarly research on the history of Rancho Los Cerritos.
- Collect, preserve and manage appropriate authentic artifacts.
- Develop innovative and effective interpretive programs on Rancho Los Cerritos history.
- Supplement the teaching of local and Southern California history in the classroom.
- Encourage local history instruction in the schools and colleges.
- Expand resources and increase accessibility of the archives, research files and research library.



Rancho Los Cerritos, date unknown. Photograph courtesy of the Rancho Los Cerritos Collections, CHP0253.

SECTION ONE • INTRODUCTION

1.0 INTRODUCTION

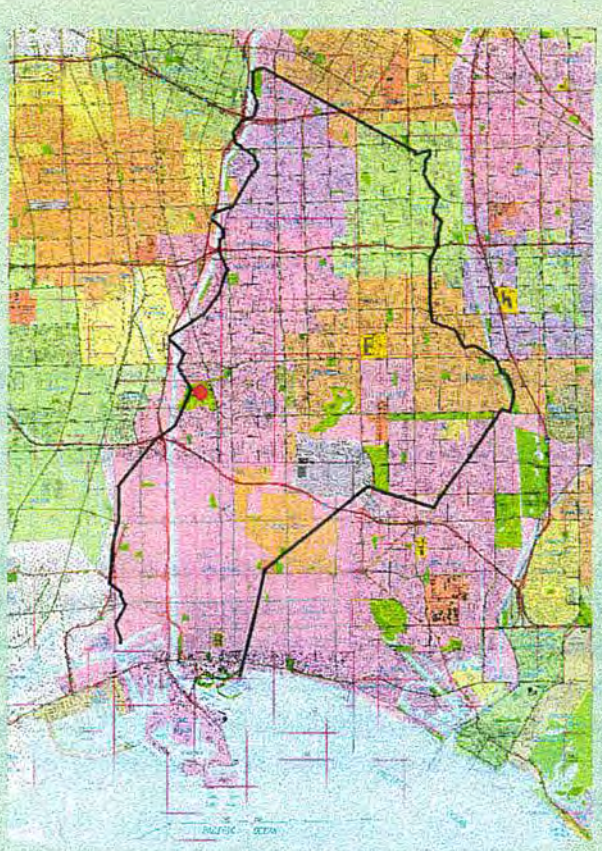
Rapid change has played a significant role in Southern California over the past 100 years. Rancho Los Cerritos represents a lost era that can be recaptured in the hearts of its visitors. It is a reflection of the history of Southern California---of who we are and where we came from. It is testimony to the strength of its people and the legacy of the land.

Rancho Los Cerritos Historic Site is an outstanding example of nineteenth century ranch life complete with the characteristic blend of Mexican and American architecture. The site offers a rare opportunity for visitors to learn about both local and regional history. The spacious two-story adobe dwelling and delightful garden surroundings tell the story of an earlier time--when cattle instead of condominiums dotted the southern California landscape. Despite lying within the city limits of Long Beach, Rancho Los Cerritos' 4.7 acres are buffered by the Virginia Country Club golf course which give the site a rural feeling in an otherwise typical residential area.

Rancho Los Cerritos, with its twenty-two ground floor rooms and intimate courtyard, possesses an outstanding potential for interpretation of historical themes beginning with the period of Native American occupation and continuing through the romanticized Spanish Colonial Revival period of the 1920s and 1930s. The story of Native American occupation, Manuel Nieto's great land holdings, John Temple's initial efforts at cattle ranching, and the Bixby family's sheep-ranching enterprises coupled with other business ventures parallels the development of Southern California into the economic center it is today. The story clearly illustrates how "the pastoral ranch system of Hispanic culture retreated before large scale crop production, small farm subdivision, and urbanization brought about by Anglo-American settlers after California became a state." With its present museum collections and trained staff, Rancho Los Cerritos--a visible reminder of an era gone by--has the potential to become one of the most visited historic sites in the Southern California area.

In 1990, a self-study of Rancho Los Cerritos was conducted by a 17-member Advisory Task Force appointed by the Mayor of Long Beach. After months of study, Task Force Members identified local criteria necessary for the site's health and success but requested professional assistance to establish significance and site use.

In May 1991, Rancho Los Cerritos received a self-study grant from the National Endowment for the Humanities (NEH) to bring in authorities in the areas of historic site interpretation, history and architecture. The consultants, together with the Chair of the Task Force's Site Use Sub-Committee and the museum's Historic Sites Officer and Historical Curator, evaluated the historic resources at the site and drafted a mission statement. The statement identified interpretive themes and sub-themes and proposed an interpretive plan for the site.



LIST OF IMPORTANT DATES IN THE HISTORY OF RANCHO LOS CERRITOS

1200-1769	Tongva people (Gabrieleno Indians) live on lands later known as Rancho Los Cerritos, village of Tibahangna said to be north of present ranch house.
1769	First Spanish settlement in California at San Diego.
1771	Mission San Gabriel founded.
1781	El Pueblo de los Angeles founded.
1784/90	Spanish soldier Manuel Nieto receives land encompassing about 300,000 acres; this is cut back to 167,000 acres.
1804	Manuel Nieto dies; his land is inherited jointly by his four surviving children.
1821	Mexico achieves independence from Spain.
1822	California comes under Mexican rule, Mexican period begins.
1834	Mission lands are secularized and the missions are closed.
1834	Nieto's land is formally divided into smaller ranchos. Daughter Manuela de Cota receives the 27,000 acre portion known as Rancho Los Cerritos.
1843	John Temple purchases Rancho Los Cerritos for $3,000 (December).
1844	John Temple builds the present Monterey-style adobe.
1846-48	Mexican-American War.
1848	California becomes a U.S. territory.
1848	Gold is discovered in northern California.
1849	The Gold Rush begins.
1849	Benjamin Flint comes to California to seek his fortune in the gold fields.
1850	California becomes a state.
1851	Thomas Flint and Lewellyn Bixby arrive in the gold fields.
1852/53	John Temple successfully defends his title to Rancho Los Cerritos before the U.S. Land Commission.
1852	Jotham and Marcellus Bixby, brothers of Lewellyn Bixby, arrive in the gold fields.
1853	Benjamin and Thomas Flint, and Lewellyn Bixby, form Flint, Bixby & Company and bring sheep to California.
1861-65	Civil War
1862/64	Period of severe floods and droughts in southern California that devastates the cattle industry.
1866	John Temple sells Rancho Los Cerritos to the Flint, Bixby Company.
1866	Jotham Bixby and his family move to Rancho Los Cerritos to manage Flint, Bixby & Company's sheep ranching operations.
1869	Jotham Bixby buys a half interest in Rancho Los Cerritos and forms J. Bixby & Company.
1874	Jotham Bixby buys an interest in Rancho Palos Verdes.
1877	Reverend George Hathaway and Martha Hathaway move to Rancho Los Cerritos.
1878	John Bixby, a cousin of Jotham and Lewellyn Bixby, leases Rancho Los Alamitos.
1881	Jotham Bixby and his family move to Los Angeles.
1881	J. Bixby & Company, together with John Bixby and I.W. Hellman, purchase Rancho Los Alamitos.
1881	Jotham Bixby provides lease with option to buy of 4,000 acres to William Willmore for the founding of a town, Willmore City and agricultural community.
1884	William Willmore is unsuccessful in forming his town, but the Long Beach Land and Water Company purchases his option and renames the town Long Beach.
1884/85	Jotham Bixby family moves back to Long Beach and builds a home on Ocean.
1887	Long Beach is incorporated.
1897	7,000 acres of Rancho Los Cerritos lands are sold to a Senator from Montana and later becomes Lakewood.
1906	1,440 acres of Rancho Los Cerritos lands are sold. The City of Bellflower is founded.
1930-31	Rancho Los Cerritos is remodeled by Llewellyn Bixby, Sr. for a family residence.
1942	Llewellyn Bixby, Sr. dies.
1955	Rancho Los Cerritos is acquired by the City of Long Beach and opened to the public as a museum.

Rancho Los Cerritos Master Plan
Nieto Land Grant / Time Line

SECTION TWO

SUMMARY OF RESOURCES AND RESEARCH

SECTION TWO • SUMMARY OF RESOURCES & RESEARCH

2.0 SUMMARY OF RESOURCES & RESEARCH

2.1 Resource Goals and Objectives

The purpose of recognizing Rancho Los Cerritos is to reveal the story of the diverse people who lived and worked on the land and how they influenced the birth of the City of Long Beach. The ranch is archaeologically significant in understanding Southern California's prehistory. The primary goal is to preserve, interpret, restore and maintain the historic features associated with the site and to endeavor to make these features and areas accessible to the public for its enjoyment and appreciation. A secondary goal is to preserve and maintain the surrounding natural setting within the context of the neighboring suburban community.

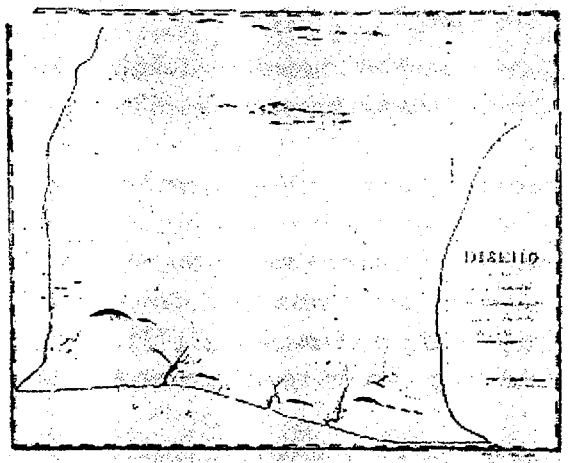
2.2 Historic Overlay/Periods of Significance

2.2.1 The Native American Period: Pre 1784

At the time of Spanish contact, the culture of Southern California included the Hokan-speaking Chumash of Santa Barbara and Kumeyaay of San Diego who lived north and south of the Uto-Aztekan (Shoshone) linguistic groups later designated by such mission names as Gabrielino, Fernandino, Juaneño, Luiseño, and occupying the coastal plain of Southern California. The Gabrielino (or Tongva) were the people living in the area of Rancho Los Cerritos. They resided in semi-permanent villages consisting of domed, conical or rectangular houses built with wooden supports and covered with brush and thatched roofs. A smaller number of Uto-Aztekan speaking bands occupied the dry and stony Mojave desert and lived a life of hunting and gathering with some trade among neighboring bands.



An artist's perspective of an Indian village. Drawing courtesy of Dr. Iris Engstrand.



Diseño Land Grant drawn for the Nieto family dated May 1, 1834. Drawn by Abel Sterns. Rancho Los Cerritos Collections.

Some form of religious rituals were practiced almost everywhere in California, and the Gabrielinos were no exception. Ceremonies were usually accompanied by music and dancing. Beliefs centered around the creation of the universe, the idea of a supreme being, a concept of immortality, prevention of disaster, freedom from pain or hunger and other aspects of daily life. The Gabrielinos, or Tongva people living in the area of Los Cerritos, honored a creator deity, Chinigchinich, symbolized by the raven and rattlesnake. Rich storytelling traditions explained the creation of the universe, the origin of people, the introduction of fire and questions of good and evil.

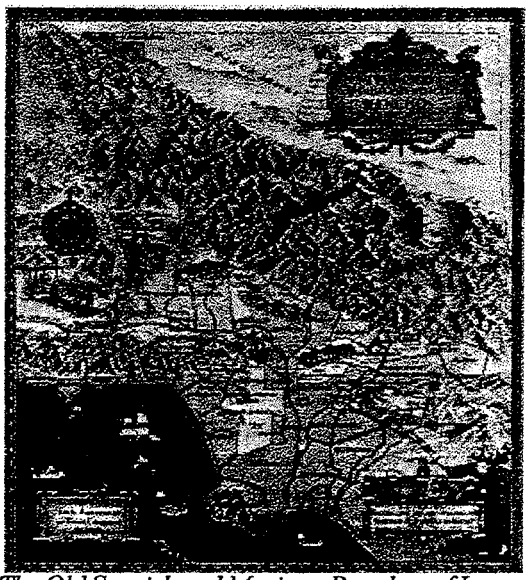
Section 2 - Summary of Resources and Research

Animals such as the Coyote, Rattlesnake, Bear, Eagle and Mouse were given human characteristics. Initiation rites in Southern California, which involved the Toloache ritual, featured the use of jimson weed that induced supernatural visions or hallucinations. The ceremony involved the impersonation of spirits by the use of costumes representing several mythical characters.

Intermittent archaeological work at Rancho Los Cerritos between 1957 and 1965 produced a rich Anglo-Mexican collection, although grinding-stone fragments, awls, scrapers and other artifacts demonstrated a continuity in aboriginal forms. "The occurrence of lumps of clay and crude figurines, added to the known historic presence of Indian women, attests to a local production" and indicates that "domestic kitchen pottery continued to be native in origin. Thus Rancho Los Cerritos has revealed a significant Indian contribution to California Mexican rancho society."

2.2.2 The Rancho Period: Nieto and Cota Families, 1790-1843

Although missions and presidios were the primary institutions founded during California's Spanish period, three civilian pueblos were also founded in the province: San José on the Guadalupe River (1777), Los Angeles on the Porciúncula (Los Angeles) River (1781) and Villa de Branciforte (1797) near present-day Santa Cruz. Beginning in 1784, a fourth feature of Spain's colonization program rivaled missions, presidios and pueblos for positions of prominence in California. The granting of large estates, called *haciendas* or *ranchos*, had been in existence since the first settlements were made in the region of Santo Domingo on the Island of Hispaniola. The Laws of the Indies provided that sites (*sitios)* of one square league—4,438.464 acres—of grazing land could be granted outside inhabited areas to persons owning a minimum of 2,000 cattle. Owners of six thousand head could petition for two sites and owners of ten thousand or more cattle, a maximum of three. The grantee was required to build a house on each site and provide a guard. Large private ranchos, as they were known in California, were a vital way Spanish civilization could be extended into frontier areas throughout the Indies. Often they took on the characteristics of small villages.



The Old Spanish and Mexican Ranchos of Los Angeles County. Title Insurance and Trust Company.

As California settlement achieved a measurable degree of permanence, several soldiers who had served in the province since the Portolá expedition of 1769 looked forward to retirement as independent cattle ranchers. Viceroy Antonio Bucareli's governmental reglamento of 1773 had envisioned that retired soldiers would be granted tracts of land within mission boundaries and thereby participate in the development of an integrated, carefully supervised civilian population. The first private grant was made in 1775 to Manuel Butrón, a soldier married to an Indian neophyte of Mission San Carlos. Butrón, however, soon abandoned

his land, located near the mission, and no further applications were made for grants in the proximity of religious establishments.

Beginning in 1784, the system of private ranchos was inaugurated in California. In that year, Governor Pedro Fages received petitions from three members of his old command who sought tracts of unoccupied grazing land beyond the boundaries of Mission San Gabriel. These grants, approved on November 20, 1786, were extremely large and covered a major portion of present-day Los Angeles and Orange Counties. Fages first assigned some sixteen square leagues, well over 75,000 acres, to Juan José Domínguez, a veteran of the San Diego presidio. Located to the southwest of Los Angeles between the San Gabriel River and salt pits on Redondo Bay, the Domínguez estate, known as Rancho San Pedro, faced the Pacific Ocean on the south and west. Juan José, who spent little time on the rancho, built a typical adobe structure with a wooden roof covered with pitch, and increased his herds to "3,000 mares, 1,000 fillies, 1,000 colts, 700 cows, 200 heifers and 260 bulls" by 1805. José Dolores Sepulveda, a friend of Domínguez' ranch manager, was granted permission to run several hundred cattle on the western part of the original grant—a tract known as Rancho Palos Verdes. In later years, after the death of Juan José, the Sepulveda heirs received title to his valuable portion of the land grant.

The second grant, a triangular, thirty-six thousand acre site encompassing a major portion of today's cities of Glendale and Burbank, was awarded to José María Verdugo, also of the San Diego presidio. Verdugo received the giant tract, called Rancho San Rafael, under Fages' simple decree of October 20, 1784, which conceded him the permission that he solicited to "keep his cattle at the 'Arroyo Hondo' a league and a half distant from the Mission of San Gabriel on the Monterey road...."



Los Cerritos Land Grant from Title Insurance and Trust Company.

The third rancho, the largest of the three granted by Governor Fages, was conceded to Manuel Pérez Nieto born in 1748 in La Villa de Sinaloa in Mexico. Nieto, a leather jacket solider (soldado de cuera), served at the Monterey presidio in 1773 and in San Diego in 1777 as part of the Loreto Company. He is listed in 1782 at the San Diego presidio as Spanish (*español*), married, age 34 and illiterate. Nieto's petition, no doubt prepared by a corporal, stated that he had an increasing number of horses and cattle with no place to graze them and wanted to be assigned a "place situated at three leagues distant from the Mission at San Gabriel along the road to the Royal Presidio of San Carlos de Monterey named La Sanja (Zanja), contemplating Sir not to harm a living soul." Governor Fages granted the land provided that "no harm was done to the Mission San Gabriel nor to the Pagan Indians or its environs in any manner whatsoever; and that he must have someone to watch it, and go to sleep at the aforementioned Pueblo." Broadly interpreted, the boundaries of Nieto's property included all the land lying between the seacoast and the "main road leading from San Diego along the hills to San Gabriel," and from the Santa Ana to the San Gabriel River, which then emptied into the sea near the present Long Beach-Wilmington boundary. Thus defined, the rancho contained nearly 300,000 acres, but the padres at Mission San Gabriel complained that Nieto's property encroached upon their land so the grant was reduced in 1790 to 167,000 acres.

Section 2 - Summary of Resources and Research

When Manuel Nieto died in 1804, his widow and children stayed on the ranch as owners of undivided interests. After several petitions for a legal division of the property, they divided their inheritance into six ranchos, grants for which were issued by Governor José Figueroa in 1834. These were the 27,054 acre Rancho Los Cerritos to daughter Manuela Nieto de Cota (patented December 7, 1867); the 28,027 acre Rancho Los Alamitos (patented August 29, 1874) and 48,806 acre Rancho Los Coyotes to Juan Jose Nieto (patented February 28, 1861); the 17,602 acre Santa Gertrudes to Antionio Maria's widow María Josefa Cota de Nieto in 1833 -1834 and regranted to Antonio María Nieto in 1845 (patent August 18, 1870); and the 33,460 acre Rancho Las Bolsas to Catarina Ruiz de Nieto widow of second son José Antonio Nieto (patent August 27, 1877). Rancho Palo Alto, an area of land in Brea Canyon, was also granted to Juan José Nieto but never confirmed as a rancho. The rancho lands granted to the Nieto heirs today encompass the cities of Long Beach, Lakewood, Bellflower, Signal Hill, Downey, Norwalk, Santa Fe Springs, Whittier, Artesia, Westminster, Garden Grove, Huntington Beach and Fountain Valley.

Judicial possession of Rancho Los Cerritos was awarded to Manuela Nieto de Cota in March, 1835. Rafael Guirado, who surveyed the land, stated that it was inhabited and stocked and that there was "a house and corrals" and some land planted in corn. Manuela and Guillermo Cota raised twelve children on the ample rancho which, in addition to cattle, had plantings of corn and wheat. Manuela, who died in 1837, left the rancho to her first born son, José María Cota, with the four remaining sons and four unmarried daughters receiving an interest in the property until married. Husband Guillermo became Executor of the Will and Pedro Domínguez, married to María de Jesus Cota, a daughter, assumed charge of Rancho Los Cerritos in January, 1841.

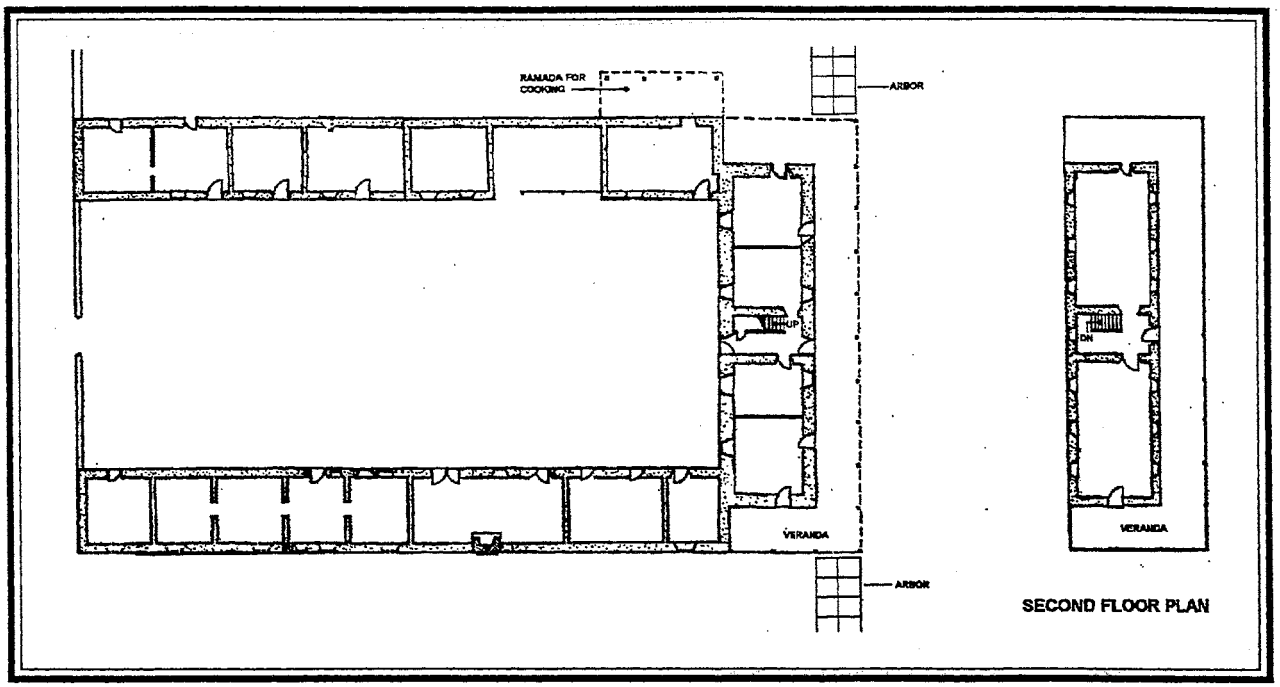
2.2.3 The Temple Period: 1844-1866

After a challenge to their title, the heirs of Manuela Nieto decided to sell the property to John (Jonathan) Temple from Reading, Massachusetts for $3,025. The price included five leagues of land for meat cattle, the branding iron and earmark. All of the heirs appeared before Judge Antonio Francisco Coronel filing letters of proof of sale of each share for $272.75, one-half in coined money and one-half in goods at market prices. The brand is recorded in the *Archivos de Fieros y Señales* (First Book of Brands), Los Angeles County Hall of Records by Felipe de Lugo.



Temple brand.

On December 13, 1843, Temple completed the purchase of Rancho Los Cerritos and began to make improvements. By 1844 he had built an adobe dwelling with walls two to three feet thick. Native Americans made adobe blocks on the site while fired bricks used for the veranda and to line the garden beds were shipped around Cape Horn. The beams were hand-hewn redwood from the Monterey area and the majority of rooms in the east wing contained redwood planked floors. The house blended traditional Spanish/Mexican features with a Monterey style second story and balcony, double-hung windows and Greek revival detailing. It was built in a U-shape with a high wall on the open side enclosing the courtyard. A two-story, 80-foot long central wing was surrounded by a double wooden veranda on three sides. Two one-story wings, used originally for storage, cooking, laundry and ranch-related functions, extended 140 feet from each end. The white-washed walls supported a flat, tarred roof.



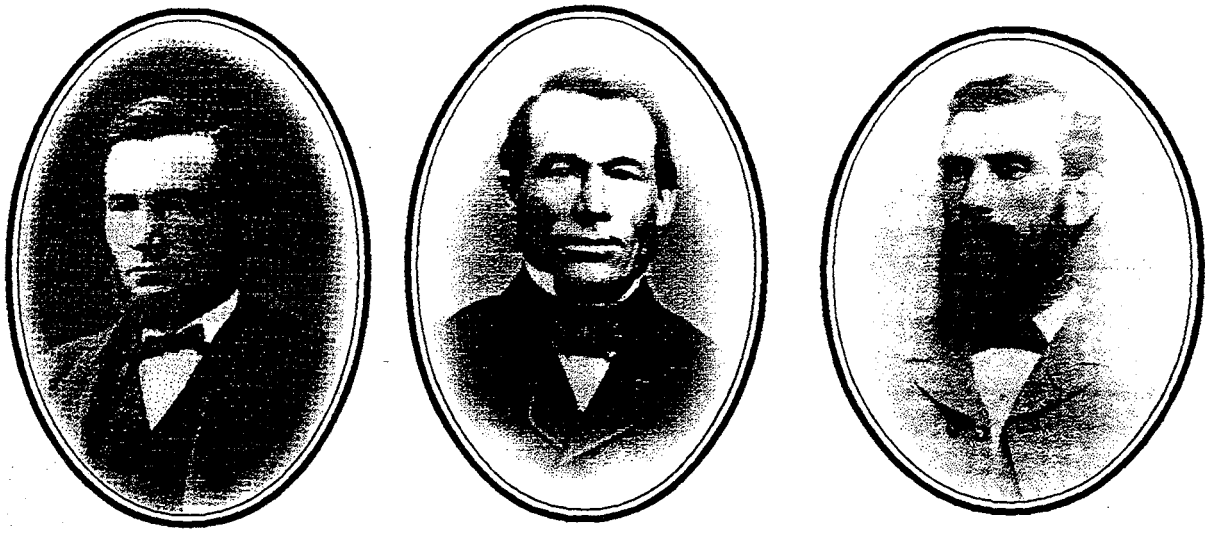
Temple Floor Plan. Drawing courtesy of Rancho Los Cerritos Collection.

Temple enclosed two acres and planted a formal garden in the back of the ranch house, requesting cherry, peach, plum, chestnut and black locust seeds from his family back east. He put about 700 head of cattle, sheep and horses on the rest of the land. In addition to Los Cerritos, Temple later owned some former mission lands of La Purísima, held properties in Los Angeles, purchased land in Mexico and maintained interests in vineyards and several ranchos. Through the 1840s, he operated a warehouse in San Pedro with David W. Alexander and engaged in the hide and tallow trade. Although Temple's major interest lay in his mercantile business in Los Angeles, he was also a successful rancher and eventually pastured some 15,000 cattle, 7,000 sheep and 3,000 horses. By 1852, he was listed as the wealthiest man in Los Angeles County, assessed at $108,000. He paid county taxes of $912. In 1858, his assessed valuation in the county had dropped to $89,556 while his neighbor Abel Stearns of Rancho Los Alamitos was assessed at $186,586.

During the 1850s Temple prospered. He had interests in several profitable trading ships sailing between Acapulco and San Francisco and took an active part in the political, commercial and social affairs of the Los Angeles area. In 1859, he built the first office building in the growing town, a combination market, theater and city hall. He planted shade trees outside his store. When daughter Francisca and her husband Gregorio de Ajuria moved to Mexico, Temple leased the Mexico City mint and coined money for Mexico under the firm Belange and Temple until 1864. The lease was nullified in 1864, then renewed. Temple operated the mint until 1893. Although this operation was initially profitable, his fortunes in California were falling.

The 1860s brought hard times to ranchers in the southern part of the state when the weather alternated between severe floods and droughts. Temple continued to make improvements at his ranch, putting in some irrigation devices and drilling a well. Nevertheless, over-extended business dealings added to a drop in cattle prices and led Temple to sell Rancho Los Cerritos to the Northern California sheep ranching firm

of Flint, Bixby & Co. in 1866 for "twenty thousand dollars in gold, or about seventy-five cents an acre for the twenty-seven thousand acres, without allowing anything for the fine adobe hacienda with its Italian garden." John Temple, who had wanted to settle his affairs and retire in Paris where his daughter was now living, died on May 31, 1866. His wife Rafaela Cota went alone to the French capital to spend the remainder of her life with her daughter and grandchildren.

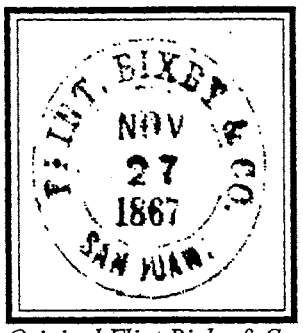


The Bixby men: (l-r) Jotham Bixby, Lewellyn Bixby and John W. Bixby. Photographs courtesy of Rancho Los Cerritos Collection.

2.2.4 The Early Bixby Period: 1866-1890

In 1866, Jotham Bixby took over as manager of Rancho Los Cerritos with an option to buy a half interest any time. Born in Norridgewock, Maine, January 24, 1831, Jotham was one of twelve children of Amasa and Fanny Weston Bixby. His older brothers, Lewellyn and Amasa Bixby, together with their cousin Dr. Thomas Flint, had arrived in California in 1851 via the Isthmus of Panama to join Flint's older brother Benjamin in the gold fields. Soon after, Jotham and brother Marcellus sailed from Maine around Cape Horn to join their brothers and cousins in California. The Flint and Bixby cousins also recognized the advantage of supplying meat to the mining camps, so they purchased a butcher shop in the mining town of Volcano, located near Sutter Creek.

Jotham remained in the gold diggings for three years while Lewellyn Bixby and the Flint brothers returned to Norridgewock with enough savings to drive sheep overland to California. In March 1853, the three men traveled by rail to Terra Haute, Indiana, where they formed Flint, Bixby & Co. In Quincy, Illinois, they purchased 1,880 sheep that they believed would be superior to those in California. After shearing the sheep in May and selling the wool clip of 6,410 pounds for $1,570 to Connable Smith and Company, the party began a ten-month drive across the continent. They arrived in Southern California with 2,400 sheep and camped for the winter near the San Gabriel Mission. In the spring of 1854, they moved the sheep up the coast to Rancho Santa Teresa, south of San Jose, and remained there for 14 months. In October 1855, they purchased Rancho San Justo in Monterey County, which served as headquarters for Flint, Bixby & Co. for the next forty years. During these years, the Bixbys and Flints married and started families.



Original Flint Bixby & Co. date stamp. From The Bixby Family Guide.

When Flint, Bixby & Co. purchased Rancho Los Cerritos in 1866, Jotham and his wife, Margaret Bixby, moved south to occupy the ranch. Jotham purchased a one-half interest in Los Cerritos in 1869 and began operations under the name of J. Bixby & Co. In the meantime, Lewellyn Bixby's wife (Sarah) had died in 1865. He later married her younger sister Mary Hathaway in 1870 and remained at Rancho San Justo, but in close contact with Jotham and Margaret, who was also a Hathaway sister. Jotham and Margaret became the parents of George H. (7/4/1864); Mary H.(2/16/1869); Henry L. (12/20/1870); Margaret H. (1/6/1873); Rosamond R. (9/13/1877); Fanny W. (11/6/1879); and Jotham W. (9/10/1884). The two Bixby families, doubly related by marriage, spent considerable time together at Los Cerritos. The sheep business was excellent since the price of wool had soared to 45 cents a pound by 1871. By 1872, the Bixbys were able to improve the two-story central wing of their adobe ranch house by replacing the original flat and tarred roof with a New England style hipped and shingled roof.

Sarah Bixby Smith (Lewellyn and Mary Bixby's daughter) , recalling her childhood days at Rancho Los Cerritos, wrote the following description:

> Originally the roofs were flat and roofed in the usual Southern California fashion, first a layer of redwood planks, then a covering of sand or gravel over which was poured hot brea (asphaltum) from the open beds beyond Los Angeles. These were the same brea pits in which in recent years the remarkable discoveries of prehistoric animal bones have been made....
>
> When the summer sun was hot on the roofs the asphalt grew so soft that we could dig it out with sticks and shape it with our fingers. Such depredations undoubtedly contributed to the unsatisfactoriness of the overhead shelter.... Uncle Jotham soon tired of dripping rain inside the house, no matter how much he prayed for it outside, so that very soon after he moved into the adobe he added a good old-fashioned Yankee roof to the main portion of the house. The roofs on the wings did not come until after I had learned the joy of the flat ones. Here we used to go at sunset to wait for the homecoming of the fathers, for whose returning buggies we could watch from this vantage ground. We also could see the whole sunset sky, and the lovely pink lights on far, faint Baldy.

According to Sarah, "the approach to the house was through the large gate in the wall that closed the patio." Apparently the courtyard, with the exception of a few locust trees and a large pink oleander, was not planted to any great extent and held several hitching posts for the saddle horses. The garden was on the far side of the house. The milk room, "the last of the series, opening into the court-yard," contained "rows of shining pans" filled with cream both for churning and for the table-- "clotted cream thick enough to spread with a knife upon hot baking powder biscuits, or a steaming baked potato."

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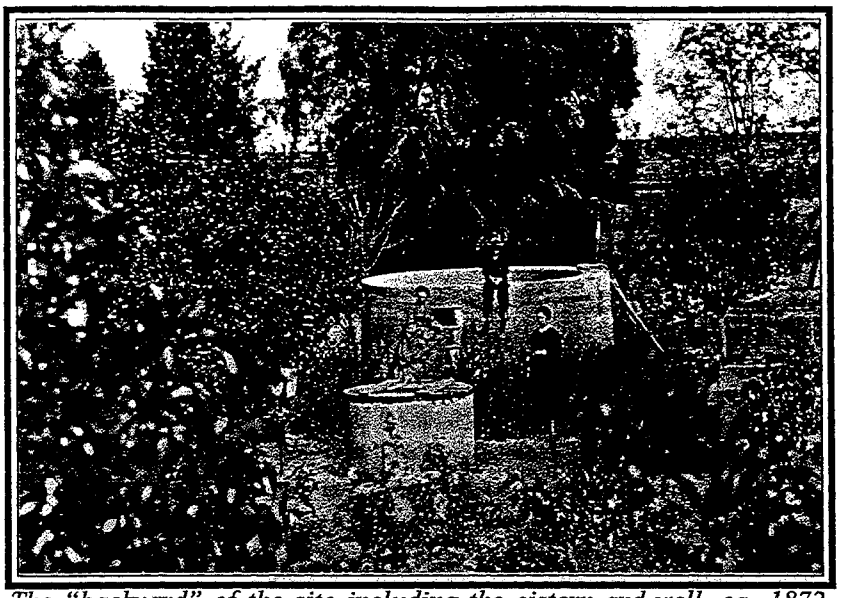


The Hathaways: (l-r) Margaret, Mary, Sarah and Susan. Photographs courtesy of Rancho Los Cerritos Collection.

Other relatives to join Jotham and Margaret at Rancho Los Cerritos were Susan Patterson Hathaway and cousin John W. Bixby. In 1873, Susan and John married. Although the newly wedded couple moved to the port town of Wilmington, John continued to work on the ranch, which was described by the *Los Angeles Star* of September 5, 1874, as follows: "One of the most thoroughly and systematically managed sheep ranches of this country is that of J. Bixby & Co. known as Cerritos or Little Hills, taking its name from a mound-like elevation at the southwestern extremity of the ranch. It is what is known as a five-league ranch, embracing about twenty-five thousand acres, about equally divided into mesa, or upland and bottom-land." Jotham Bixby had at that time 30,000 sheep--Spanish Merinos--of which 25,000 belonged to the company. They averaged ten pounds of wool each per year with shearings twice a year. John kept a careful record of his transactions in a ledger labeled "the Wilmington Ledger." In addition to complete details regarding the sheep industry, the ledger also listed John's personal expenses, including even the ring he bought for his marriage to "Susie."

The Bixby/Hathaway clan in California continued to grow as John and Susan gave birth to son Fred in 1875 and daughter Susanna in 1880. The Reverend George Hathaway, after the death of his second wife, had also moved in June 1877 from Maine to Rancho Los Cerritos with his daughter Martha. Other ranch residents at this time included Ying, the Chinese head cook, and Fan, his assistant; Juan Ignacio, ranch employee, and his wife; Juan Cañedo, a *vaquero* who had worked for Temple, assistants José, Romulo and Miguel, of mixed Spanish and Indian descent; Jim Rainey, teamster, and several other persons who stayed for various periods of time. The Cerritos school was built about this time and John Bixby sub-leased several thousand acres of neighboring Rancho Los Alamitos. He and Susan moved to Rancho Los Alamitos in 1878.

All was not well, however, for the sheep industry in California. An 1872 drought caused a temporary price collapse, but the industry recovered until it reached a high point of seven million head in 1874. Jotham Bixby purchased 1,500 acres of Rancho Palos Verdes in that year. A more serious drought in 1877 caused sheep prices to fall to 25 cents per head and baby lambs were slaughtered to protect the remaining herds. Much land was diverted to orchards, farms and dairies. The Jotham Bixby family moved to Los Angeles in 1881 but continued to operate Rancho Los Cerritos for about five more years. Nephew



The "backyard" of the site including the cistern and well, ca. 1872. Photograph courtesy of the Rancho Los Cerritos Collection.

George Bigelow Bixby, along with nephew Abraham Lincoln Lovett, took over management responsibilities and lived at the ranch for several years. Jotham's brother, Marcellus Bixby, also ran a dairy of fifty cows on the ranch, making 200 pounds of butter per week. Also in 1881, John Bixby, J. Bixby & Company and I. W. Hellman, a Los Angeles banker, purchased Rancho Los Alamitos.

THE AMERICAN COLONY.

This new colony for Los Angeles county is now forming to locate on the

Cerritos Ranch,

Fronting on San Pedro Bay. Parties looking for a desirable location to make homes should see these lands before purchasing elsewhere. Parties can go and see the Colony tract and return the same day from Los Angeles. For further particulars apply to or send stamp for Colony map, prospectus, etc., to

W. E. WILLMORE,

Baker Block, Room 9,

LOS ANGELES.....CALIFORNIA

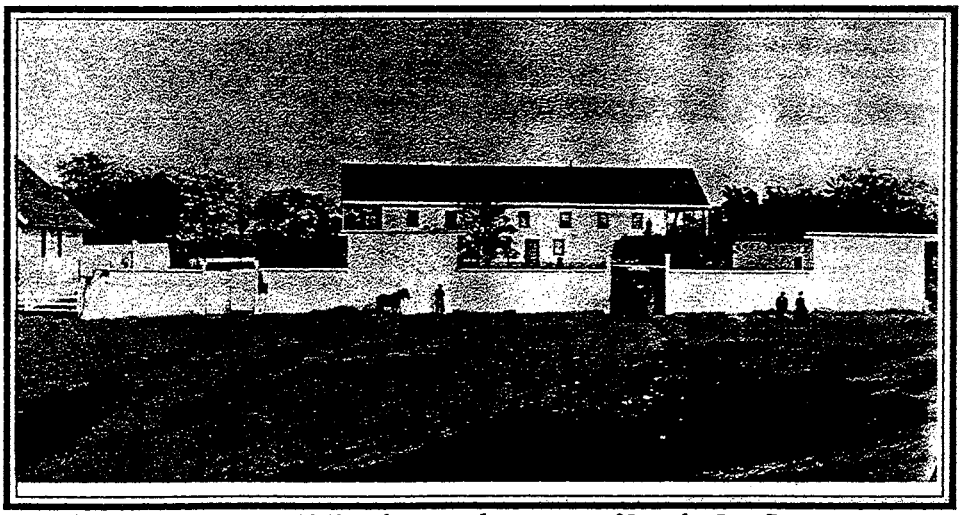
Willmore advertisement. From The Bixby Family Guide.

Rancho Los Cerritos had an ample water supply since, by 1880, ten artesian wells had been sunk on its grounds. Archibald Borden and his four sons came to Los Cerritos to raise wheat and barley as sharecroppers. They constructed a shack near what is now Pine Avenue and First Street in Long Beach and used it when they had to work in the fields. Because a shepherd for the Bixbys also occupied the shack when the sheep were turned out for grazing, it became known as the "sheepherder's hut". William Willmore, originally from England, then leased 4,000 acres of Rancho Los Cerritos in

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1881 with an option to buy in three years. Willmore had been introduced to Jotham Bixby by John Temple, nephew of Bixby's predecessor John Temple and a director of the California Immigrant Union, and received CIU backing for his project. He began to lay out Willmore City and establish the "American Colony" complete with artesian wells, five to 40 acre farms, town lots and even a college or university. Willmore's plan was to attract farmers and dairymen. In the meantime, Charles Healey and his family resided at Rancho Los Cerritos while Healey surveyed land for the colony. Despite an aggressive advertising campaign, Willmore lost his option on the ranch lands in 1884 and the contract was picked up by the real estate firm of Pomeroy and Mills who quickly formed the Long Beach Land & Water Co. With the Boom of the Eighties in full swing, times were better and the city that they established was called Long Beach. It was incorporated on February 10, 1888 as a city of the sixth class. The ninth ordinance passed by city trustees in April prohibited the establishment of saloons and gambling houses.

In 1885, shortly after Willmore's plan failed, Jotham and Margaret Bixby returned to what had become Long Beach and built a house at the corner of Magnolia and Ocean, entering into local affairs. Their youngest daughter Fanny, born in 1879 and the only one of four daughters to live beyond the age of 22, lived with the family in their Long Beach homes. Jotham, who had also sold 6,000 acres of the northern portion of Rancho Los Cerritos to the California Cooperative Colony, had turned his interests away from ranching to subdividing. John Bixby, who had moved with his family to Rancho Los Alamitos, died suddenly of peritonitis at the age of 39 in 1887. For this reason, the Alamitos Land Company was incorporated with I. W. Hellman as president and Lewellyn Bixby as vice president. Alamitos Townsite had been laid out by John just before his death so the other partners followed John's plans for the community just east of the young city of Long Beach. In 1891, the final decree of partition of the J. W. Bixby Company estate gave one-third--(the northern portion of Los Alamitos)--to J. Bixby Co. and Jotham Bixby received one-half of this third. I. W. Hellman received one-third of the property and Susan Hathaway Bixby, John's widow, received the central portion of Los Alamitos for herself and her two children, Fred and Susanna. She leased out the property and moved to Berkeley with her children who attended school there.

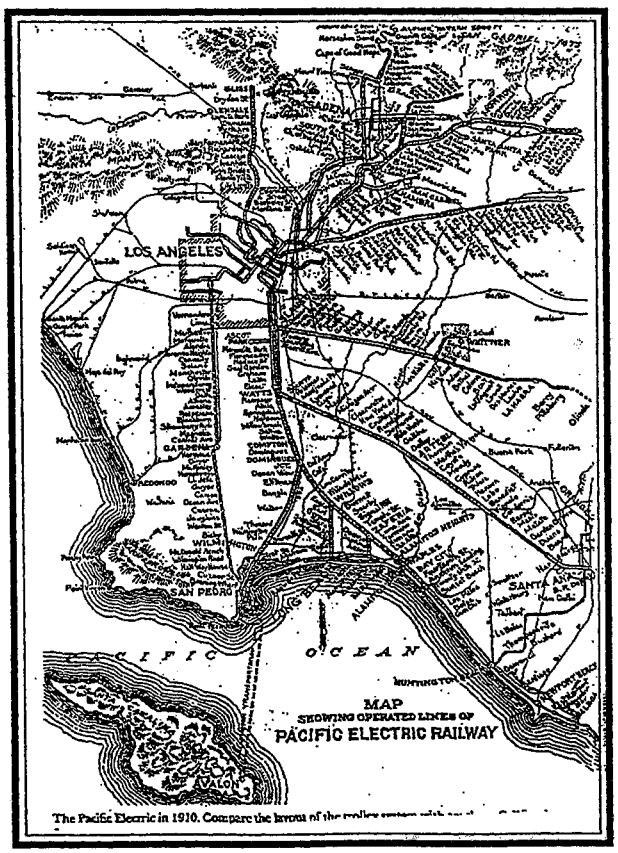


Rancho Los Cerritos, ca. 1872. Photograph courtesy of Rancho Los Cerritos Collection, CHP0245.

Sheep operations at Rancho Los Cerritos had decreased considerably during the late 1880s and had essentially ceased by the early 1890s. Gradually the property at both Cerritos and Alamitos was subdivided for sale or fenced--in for the dairying operations that characterized the next few decades. These were overseen by Jotham and son George H. Bixby. The Alamitos Land Company retained acreage on and to the east of Signal Hill, engaged in farming, acquired new ranch properties in the Imperial and San Joaquin valleys and developed commercial projects.

2.2.5 The Tenant Period: 1890-1929

The years from the late 1890s to the end of the 1920s became a period of transition for Rancho Los Cerritos. A number of different residents occupied the ranch as activities varied and boundaries were redrawn. The most significant change was a decline in the fortunes of Flint, Bixby & Co. The company had diversified as California grew in population, and their funds were placed in several different ventures, some of which were more profitable than others. Their production of beet sugar ended in 1880 because of high processing costs and competition with Hawaii. In 1897 they incorporated the Rancho Palos Verdes Company, with Lewellyn's estate (1/4), Thomas Flint (1/4) and Jotham Bixby (1/2). The Rancho Palos Verdes Company was specifically formed to assume the assets and liabilities of the J. Bixby & Co. partnership. The significant assets included land at Palos Verdes plus the remaining Los Cerritos property held by J. Bixby & Co. The primary focus of the Palos Verdes Company was the operation of a cattle ranch until 1913. One-thousand acres near present-day Lakewood was the land involved in the Clark transaction.



The Pacific Electric Railway in 1910.

From 1898 to 1906, dairyman William Boyle and his son Johnny lived at Rancho Los Cerritos with 150 cows and five to six milkers, including John A. Wilson in 1903. In 1906, Charles McWilliams, E. H. Skinner, W. E. James and F. E. Woodruff purchased 1,440 acres for $250,000. Bellflower was also founded. That same year the acreage around the Los Cerritos adobe, which had been operated as a dairy until that time, was subdivided for the Cerritos tract. The remainder of the acreage not leased to dairymen and farmers raising grain and lima beans was planted with barley and alfalfa under the management of the Jotham Bixby Company (founded 1902).

By 1910, Rancho Los Cerritos was no longer an isolated rural area. The Pacific Electric Railway, built by Henry E. Huntington to connect the City of Los Angeles with outlying suburbs, passed west of Los Cerritos on its way on to Signal Hill, Alamitos and Orange County. From 1908 to 1910 the Thomas Ricketts family lived at Los Cerritos with their four children. Daughter Mary was born there in 1908.

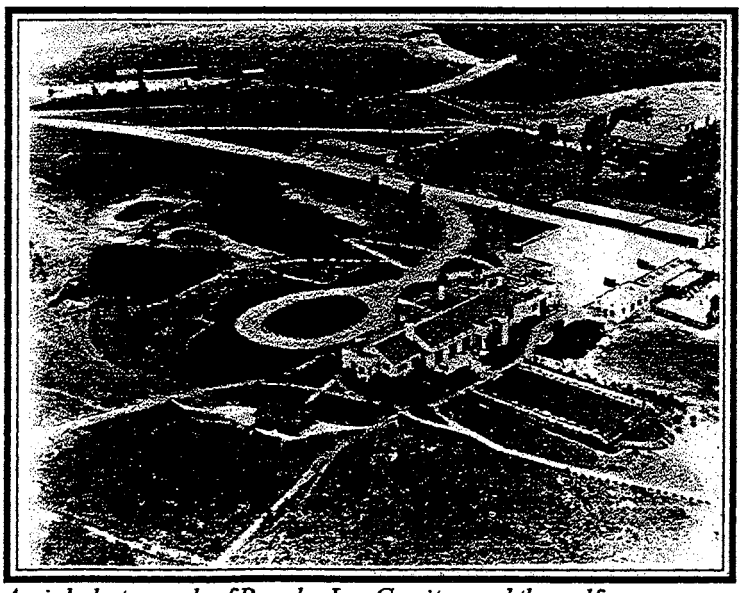
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Manuel Liera and Concepcion Coronado, standing at the southeast corner of the Ranch House. The Coronados lived at the site in the early 1920s. Concepcion and Manuel were married in 1924 and lived at the ranch from 1924-1926. Photography courtesy of Rancho Los Cerritos Collection, CHP0366.

They were followed by the Rosales family from 1910 to 1916, whose daughter Jenny was born at the ranch in 1910. Her sister Cecilia went to school with Loretta Berner, who later became a Long Beach historian. Ramona López ran a boarding house upstairs from 1910 to perhaps 1919. Also living there were Bill and Mary Lerg with three children. Daughter Ethel was born at Rancho Los Cerritos in 1911 and the family moved to Los Angeles in 1913. In early 1915, Jotham and George H. repaired the adobe with new shingles and applied a fresh coat of plaster to the walls. Sadly, Jotham Bixby died at his home in Long Beach in 1917 so little more was done to the ranch house over the next decade. The Coronado family lived at Cerritos from 1920 to 1926 and daughter Mary (1920) was born at the ranch house. Manuel Liera moved to the ranch in 1921 to begin work at the new Virginia Country Club adjacent to Rancho Los Cerritos. He married Concepcíon Coronado and held the wedding reception at the ranch in 1924; their daughter Rosie was born there in April 1926.

Immediately after the turn of the century, lot sales were brisk in the Long Beach townsite area. Many residential lots were sold by whole blocks and later re-subdivided by the new owners. By 1920, the southerly slope of Signal Hill contained a large number of truck gardens and the upper slopes of the hill were forming the prime residential sites because of their magnificent views of the Pacific Ocean and Catalina Island. These ideally located sites were abruptly transformed on June 23, 1921, when oil was discovered by Shell Oil Company in Alamitos Well No. 1 at Temple and Hill streets. Alamitos Land Company had leased some 100 acres to Shell in January 1921, and this discovery touched off an oil boom that forever changed the character of Signal Hill. At this same time, on June 15, 1923, the voters of Long Beach overwhelmingly approved a bond issue for $900,000 to purchase 257 acres from the Alamitos Land Company for Recreation Park. The Virginia Country Club, which had previously leased the park area property since its founding in 1909 (with initiation fees of $25 and dues of $2.50 monthly), moved to its present location nearly surrounding the Rancho Los Cerritos Adobe. The Virginia Country Club had purchased the land east of the rancho in 1919 and began construction of the golf course, which opened in 1921. Manuel Liera worked at the club until 1935.

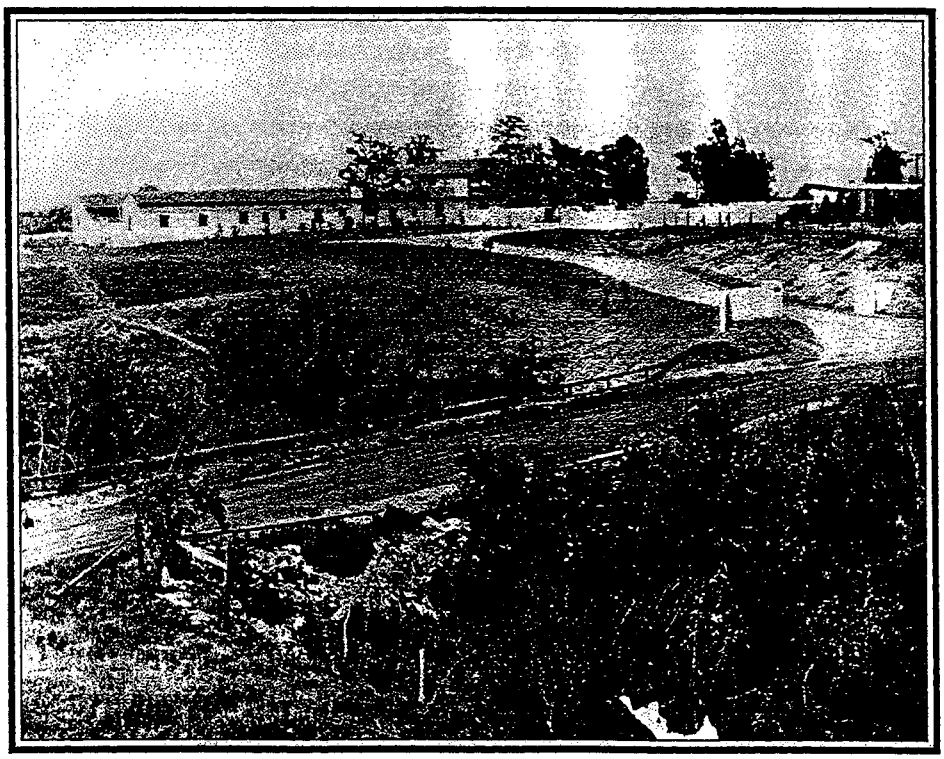


Aerial photograph of Rancho Los Cerritos and the golf course, ca. 1925. Photograph courtesy of Rancho Los Cerritos Collection, CHP0402.

2.2.6 The Bixby-Cornell Period: Remodeling Rancho Los Cerritos, 1930-1954

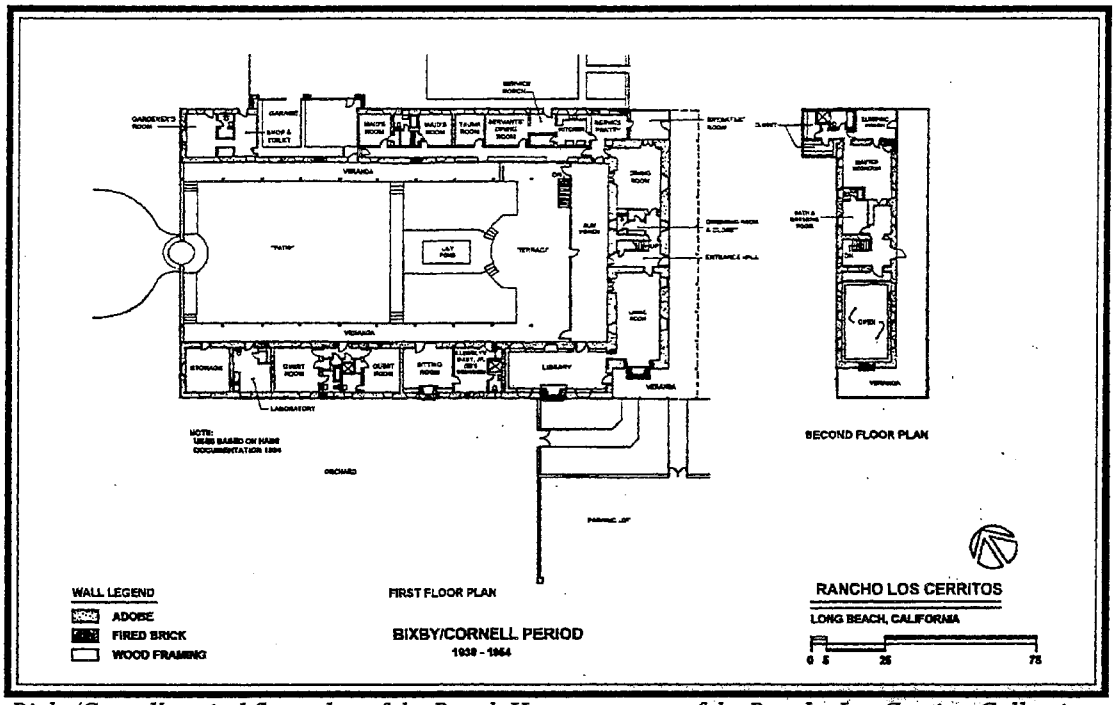
The southern properties of Flint, Bixby & Co. had been re-formed as the Bixby Land Company in 1898. It was equally owned by Jotham and Llewellyn Bixby Sr. (II), who married Lillian Avis Smith in 1901. Llewellyn and Avis became the parents of Llewellyn Jr. (III) and daughter Avis, who later married Paul Harwood Dudley. Llewellyn Bixby Sr., who graduated from Pomona College in 1901 and studied civil engineering at MIT, became a board member of Alamitos Land Company in 1907. He no doubt shared the interest of his uncle and cousin in restoring the ranch house. A newspaper article from January 8, 1913, indicated that Jotham and George H. Bixby had made plans to preserve the home and wanted to restore it to "as far as practicable, the style and atmosphere of the past." The Bixbys hoped to replace the old stockade fence with a well-trimmed hedge "to keep out wandering marauders, whether on two legs or four" and construct a flat, waterproof roof.

However, it was not until 1930 that Llewellyn Bixby Sr., serving as president of the Bixby Land Company since 1921, could follow up on the project. He entered into a contract with the construction firm of C. T. McGrew & Sons and began to work with architect Kenneth Wing on the preliminary design in August 1930. The redesign combined the original Monterey Colonial style with a simplified Spanish Colonial Revival style. On December 30, 1930, the Jotham Bixby Company sold the Rancho Los Cerritos adobe and 4.7 remaining acres to nephew Llewellyn Bixby Sr. for $1.00. Llewellyn moved to the ranch house with his wife Avis and son Llewellyn Jr. on St. Patrick's Day, 1931.



Rancho Los Cerritos, ca. 1931. Photograph courtesy of the Rancho Los Cerritos Collection, CHP0381.

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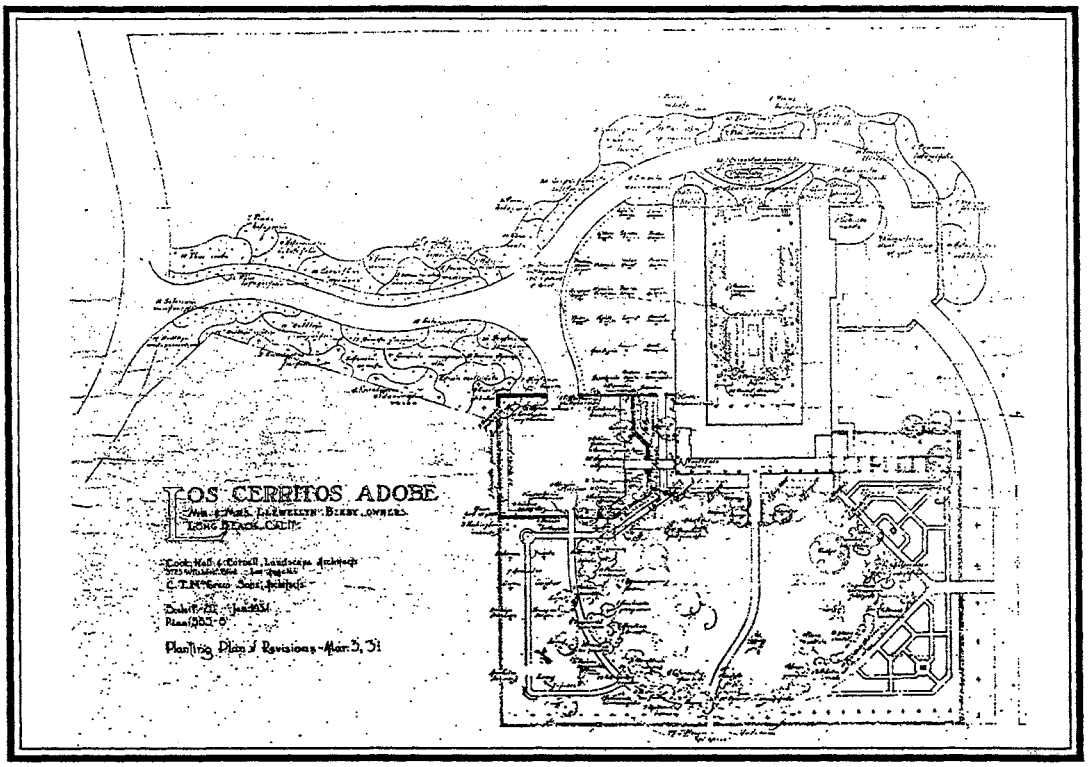


Bixby/Cornell period floor plan of the Ranch House courtesy of the Rancho Los Cerritos Collection.

Construction documents for the renovation were prepared by architect Wing and L. T. Evans, structural engineer. C. T. McGrew and Sons served as the general contractor. The Spanish-style configuration and walls were retained and some of the newly constructed doors and hardware were based on original styles. In the two-story central wing, two adobe walls and a ceiling were removed in order to fashion a larger dining room and a high ceiling, double-height living room. A sunporch was added off the dining and living room areas to extend the living space and connect rooms with no need to go outdoors. The upper and lower verandas were enclosed at the north end of the same wing to create a breakfast room, sleeping porch, bathroom and closets. In both one-story wings, adobe walls were removed and altered to accommodate bedrooms, six bathrooms, a four-car garage and servants' quarters. Tile roofing was installed, and five cellars or vaults were excavated for furnaces and lined with concrete walls and floors. Modern conveniences such as fireplaces, gas furnaces, plumbing and electricity were added to make the home suitable for modern living. A brick wall added in 1930 enclosed two acres to form a garden.



The sunporch, ca. 1930s. Photograph courtesy of the Rancho Los Cerritos Collection, CHP0195.

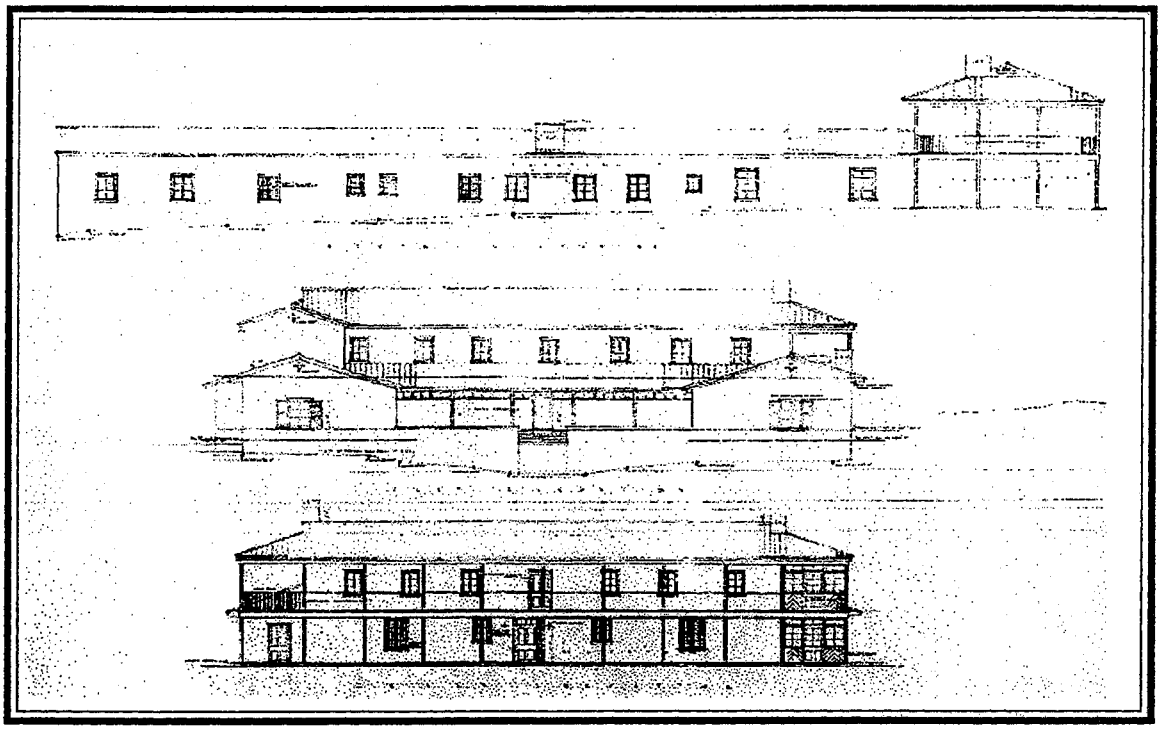


Cornell's plan courtesy of the Rancho Los Cerritos Collection.

In 1930, Llewellyn Bixby Sr. hired the well-known landscape architect Ralph D. Cornell to create a garden plan for Rancho Los Cerritos. Both Cornell and Bixby wanted to incorporate native plants, preserve the trees and plants surviving from John Temple's formal garden and rescue those remaining from Jotham and Margaret Bixby's time of residence. Surviving landscape elements planted by Temple included an osage orange, three pomegranates, two citrus, two olive and three Italian cypress trees. Several black locust trees, offsprings of those that ringed the old garden fence line, still survived along with the large Moreton Bay Fig from the Bixby era.

Cornell's overall plan called for a sweeping driveway for the southern entrance and western boundary, bordered by curving layers of trees and shrubs. Outside the south wing he planted a neat grid of both familiar and exotic fruit trees. Around the Moreton Bay Fig, Cornell laid out a central lawn bordered by trees and shrubs and bounded by a walkway. A brick path extended from the house to the country club gate, bisecting the entire garden. In the two northern corners, Cornell placed formal flower beds and rose gardens. At the south end, in the vicinity of the old well, he had the old water tower repaired. Northward from the veranda of the house ran a replicated arbor. A red brick wall, painted white, surrounded this garden retreat, separating it from the country club on the east, service yard on the north and forecourt on the south. The inner courtyard was regraded and the newly bricked side walkways were joined near the sunporch by a brick terrace, below which lay a small pond. Cornell framed the garden's grassy center with a formal boxwood hedge, and planted several sycamores, citrus, flowering fruit trees, an olive and several shrubs and perennials. Overall, Cornell created a pleasant garden atmosphere to surround the remodeled living quarters of the Bixby family.

Section 2 - **Summary of Resources and Research**



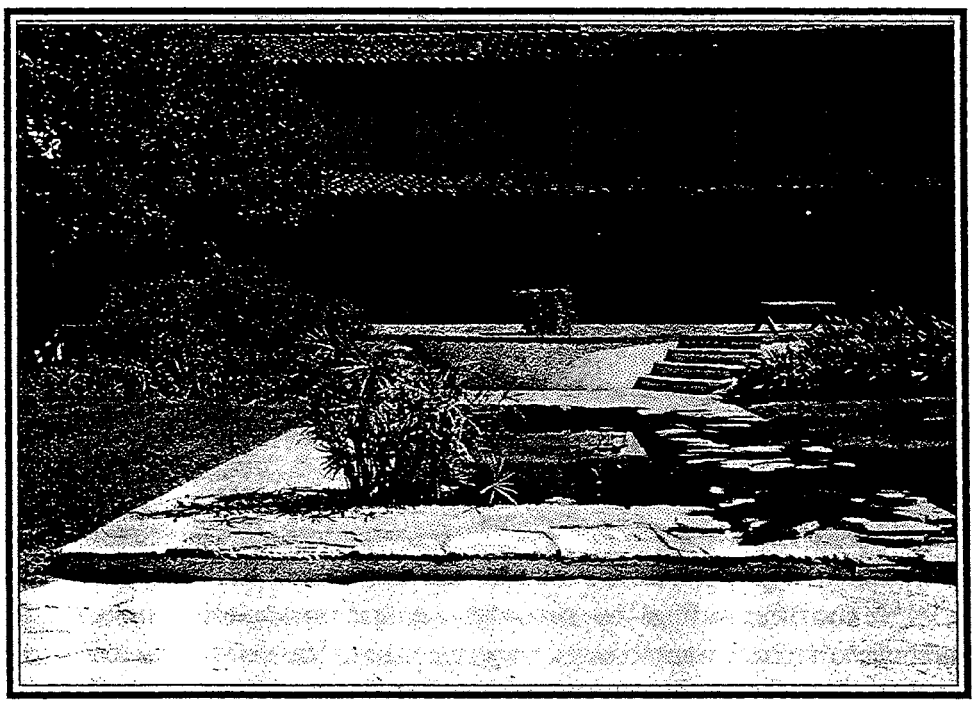
Historic American Building Survey, elevations for the Ranch House, 1934. Courtesy of the Rancho Los Cerritos Collection.

From March 6 to March 13, 1934, an Historic American Buildings Survey was made of Rancho Los Cerritos under the supervision of District Officer Henry F. Withey and Squad leader Dan Cathcart. In 1937, the rancho was designated by the Advisory Committee on Historical American Buildings Survey of the Department of the Interior as possessing "exceptional historic or architectural interest" and being "most worthy of careful preservation for the benefit of future generations." The ranch house was indeed a spacious and luxurious home representing a romanticized bygone era of Southern California.

The Bixbys continued to occupy Rancho Los Cerritos until the death of Llewellyn Bixby Sr. in 1942, leaving his widow Avis alone in the rambling adobe. Son Llewellyn Jr. had moved out in the summer of 1934, shortly after marrying Elizabeth Church Lewis, and daughter Avis Dudley lived with her husband Paul and sons Paul and Stephen elsewhere, although they spent a few months at the ranch in 1947 while building a new home. Avis Bixby lived at Los Cerritos a few more years but then moved to the Villa Riviera apartments overlooking the Pacific Ocean near downtown Long Beach. Avis Smith Bixby died in 1959.

2.2.7 The City of Long Beach Period: 1954-Current

Beginning in 1943 the City of Long Beach began working to acquire the rancho as an historic site. Efforts for a combined purchase of the site by the City, County and State failed in 1945. Finally, in December 1954, under Resolution No. C-15278, the City of Long Beach leased the rancho for one year for $10,000 (to be applied to the purchase price) and reserved an option to buy it for $80,000, if the option were exercised by October 1955. The City, which had opened a museum on the site, decided to exercise the option but needed an extension until September 1956 to pay the balance of $70,000. The City was granted the extension and completed the purchase of Rancho Los Cerritos in that month for use as an historical monument, park and library. Its total cost amounted to $82,400. Rancho Los Cerritos was designated as a National Historic Landmark with appropriate dedication ceremonies on October 22, 1970.



Inner courtyard looking east towards the Ranch House. Photograph courtesy of Architect Milford Wayne Donaldson, FAIA.

Section 2 - Summary of Resources and Research



Rancho Los Cerritos, ca. 1872. Photograph courtesy of the Rancho Los Cerritos Collection, CHP0278.

2.3 Architectural and Landscape Resources

Summary of Historical Site Conditions

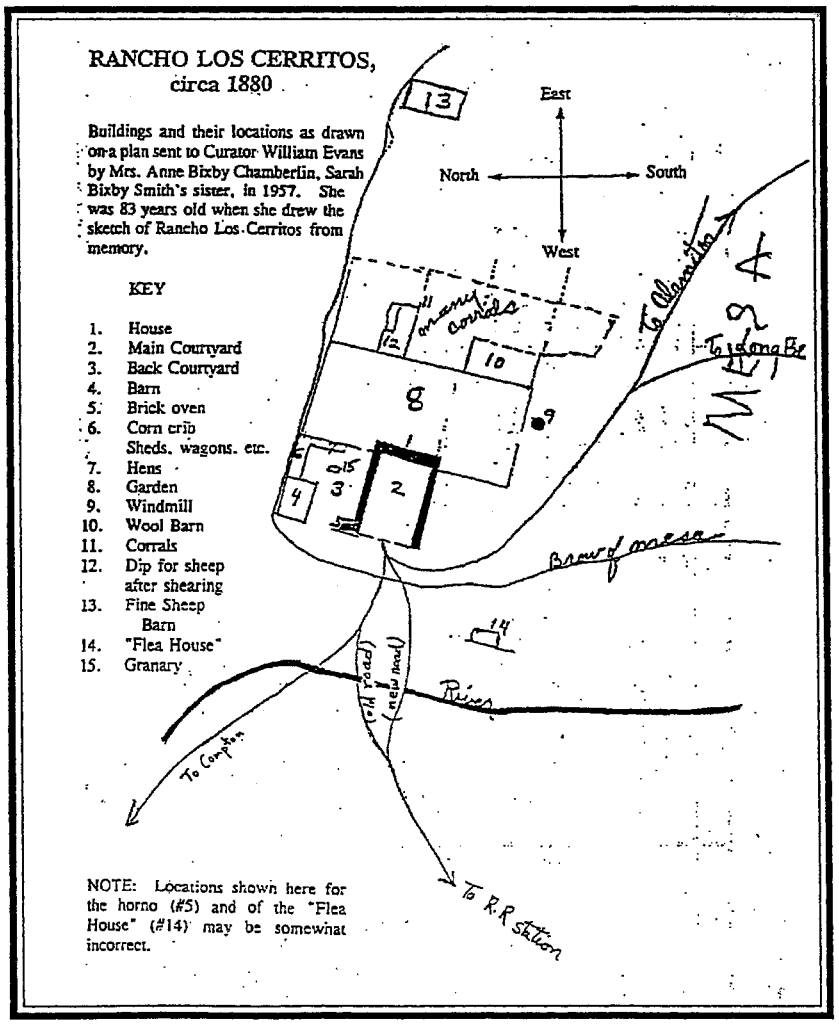
Los Cerritos was once a part of an early two-part Spanish land grant of 300,000 acres given to Manuel Nieto in 1784 and 1790. A portion of the land was purchased from one of Nieto's heirs by John (Don Juan) Temple. In 1844, Temple began construction of the ranch house.

Upon completion, Temple's house was probably one of the largest and most impressive domestic adobes of its time for colonial Southern California, and his extensive gardens were unique for the time period.

Temple built the ranch house as a country home and headquarters for his cattle ranching operation. The house blended traditional Spanish/Mexican features with attributes of the Monterey style of architecture. The two- and three-foot thick walls of the house were made from sun-dried adobe, made at the nearby river. The approach to the house was through a large gate in a high adobe wall that enclosed the large, 140 foot long, central courtyard. This courtyard was planted minimally and intended for basic ranch business. It was the workyard where horses, carriages and buggies were saddled and prepared. The two wings contained foreman's quarters, storage rooms and shops that opened into the courtyard with supplies, tack rooms, blacksmithing, laundry and cooking facilities. There were also water troughs and hitching posts. It was probably due to John Temple's travels, local availability and back east connections that his large 1850s garden appeared to be a mixture of New England and subtropical influences. This garden was about two acres in size and was enclosed entirely by the building and a ten to twelve-foot tall wood fence. His main residence was in Los Angeles but he spent a lot of money on his garden at Rancho Los Cerritos.

Photo documentation shows planting that included: apples, oranges, figs, olive trees, peaches, pomegranates, tall Italian Cypress, and locusts. There were formal raised beds containing roses, grape vines, and other flowers. There were earlier references to Temple's garden style as being Italian, however most feel that it probably referred more to its formal layout rather than its Mediterranean resemblance. There was also a summer house, built either by Temple or Bixby, that offered a cool retreat for relaxation.

Other buildings and site features surrounding the adobe as described in 1957 by Anne Bixby Chamberlin, Sarah Bixby Smith's sister when she was 83 years old, were a barn, brick oven, corn crib, sheds, windmill, wool barn, corrals, a dip for the sheep after they had been sheared, a fine sheep barn, a "Flea House" and a granary.



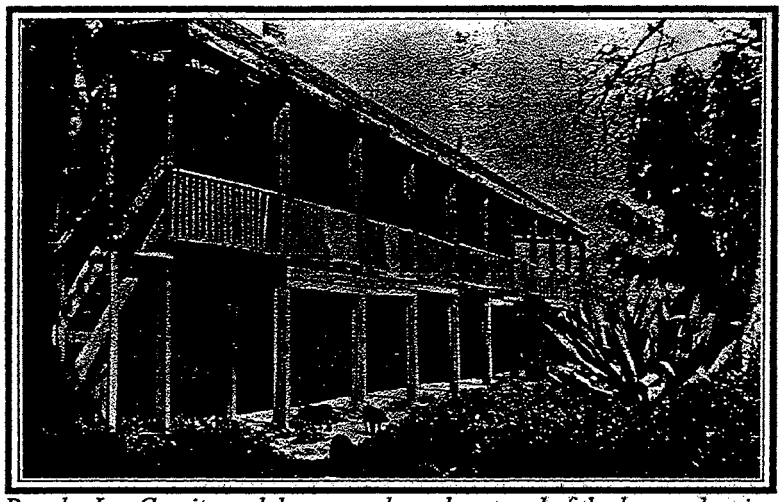
Anne Bixby Chamberlin's 1957 drawing of the site. Drawing courtesy of Rancho Los Cerritos.

Section 2 - Summary of Resources and Research

In 1866, Temple sold Los Cerritos to Flint, Bixby & Co. for $20,000 in gold. A few physical changes were made to the ranch. The flat roof of the two-story section was replaced with a wood shingle gable after 1866 by the new occupant, Jotham Bixby. Before 1881, Bixby added gabled, shingled roofs to both wings.

Two Moreton Bay Fig trees were planted together by 1880 at the corner of one of the rectangular planting beds and eventually grew into one tree. The fig tree now has a spread of over eighty feet. The family also constructed ten wells and a windmill to provide a reliable source of water to the house and gardens.

The excitement of the sheep industry lasted 10-15 years, but by the late 1870s, the Bixbys recognized the economic advantages of colonization and sub-division. The family sold or leased other parts of land for dairy farms, crops and townships and the era of big ranches faded away. Over the next 40 years the ranch was occupied by many different tenants. Outbuildings eventually fell into disrepair and were removed.

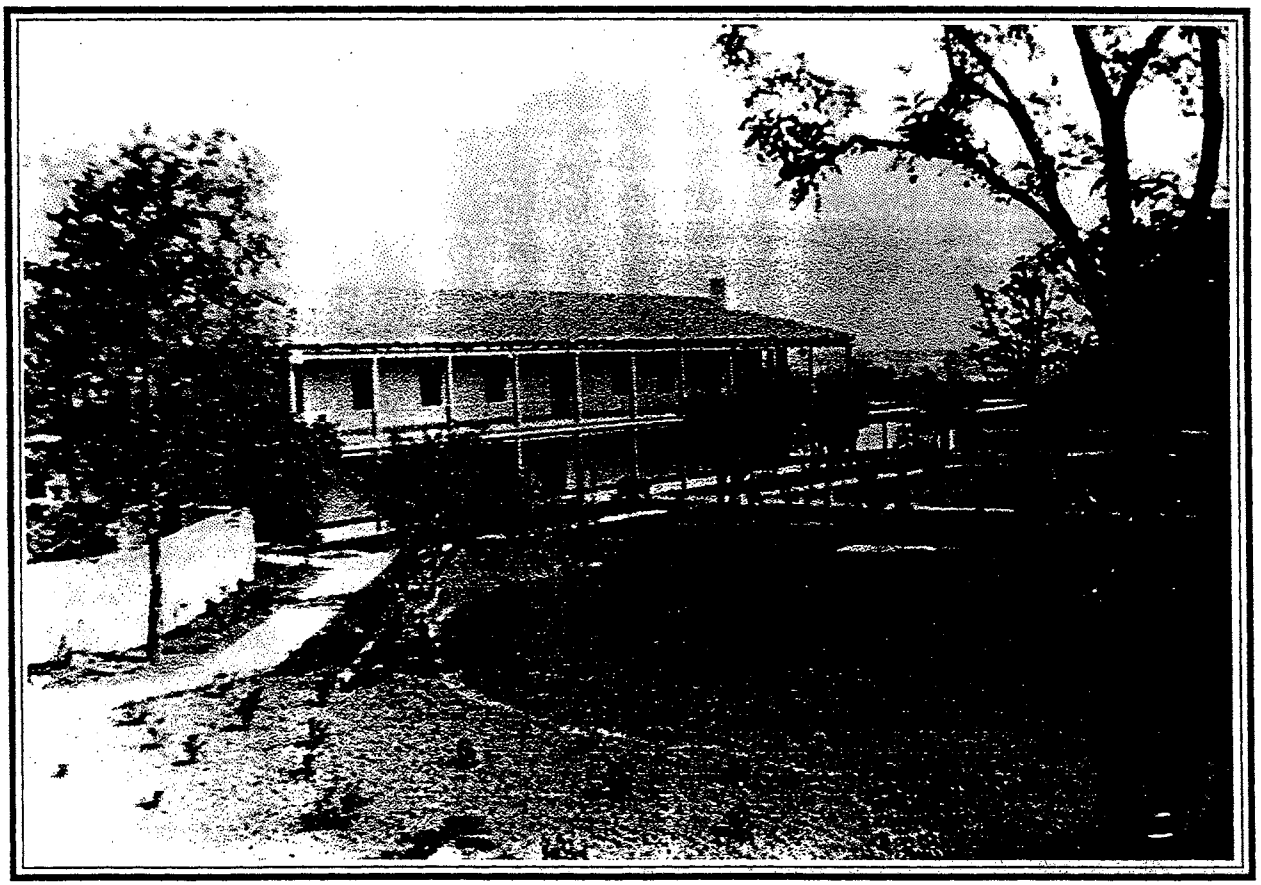


Rancho Los Cerritos adobe, veranda and east end of the house showing the stairs to the second floor. Pigs can be seen in the foreground. Photograph courtesy of the Rancho Los Cerritos Collection, CHP0193.

Rancho Los Cerritos was renovated for use as a private residence in 1930-31 by Llewellyn Bixby Sr., a nephew of Jotham Bixby, with the guidance of Architect Kenneth S. Wing and Contractor C.T. McGrew and Sons. The renovation was extensive and followed the "Spanish Colonial Revival" Monterey architectural style. Renovations included a new red-tiled roof, courtyard landscaping, expanded rooms, electricity, heating, plumbing, fireplaces and a sunporch. The original configuration of Temple's adobe was left intact.

Llewellyn Bixby, Sr. commissioned well-known landscape architect Ralph D. Cornell to develop a master landscape plan for the adobe rancho. A number of different design themes were evaluated (and are documented) before one plan was finally selected. Some of the design elements included a sweeping main driveway from the south, incorporating layers of flowering and native plantings; and preservation of as many trees as possible from both the Temple and early Bixby eras. Cornell attempted to utilize flowers and shrubs that were known to have been acquired during Temple's time. From the Temple era, there are three of the five original Italian cypresses, off-spring of the original black locust trees, three pomegranates, two olive trees and an osage orange.

In 1998, almost seventy years after the gardens were installed, many of the historic plantings are still alive and well. The majority of the historic theme plantings of Rancho Los Cerritos originate from Ralph Cornell's 1930 planting design. It is obvious that some of these plant materials have died, been removed or were relocated. The City of Long Beach may also have chosen, on many occasions, not to replace certain dead or dying plants based on budget, availability, suitability, convenience, protecting the adobe structure or maintenance (insects and disease problems).



Rancho Los Cerritos dated 1931. Photograph courtesy of the Rancho Los Cerritos Collection, CHP0381.

Section 2 - Summary of Resources and Research

The current landscape character of the adobe rancho has the ambience of an informal estate garden, nestled in a secure and well established residential community. This feeling is accentuated as one drives to the rancho by way of treelined Virginia Road through an exclusive neighborhood and past lush green country club grounds with notable homesites surrounding the adobe. The established plantings viewed along Virginia Road create an early Spanish Colonial Revival landscape of the 1920s.



The arroyo. Photograph courtesy of Architect Milford Wayne Donaldson, FAIA.



1980s enclosed courtyard walls with Bougainvillea vines. Photograph courtesy of Architect Milford Wayne Donaldson, FAIA.

The landscape begins to appear a little tattered as one drives past the country club parking lot entrance. The plantings along the roadside, prior to the Rancho entry gate, are primarily made up of Peppers, Acacias and others. A modern wooden sign and mailbox announce the ranch entrance and a large Pepper tree hides the gate. The entry into the Ranch does have a rustic and charmed feel to it and sets the stage for the adobe ranch and garden. The visitor passes through the historic-looking wooden gates and the right side of the sweeping driveway is lined with a dense variety of competing and overgrown plantings including acacias, peppers, eucalyptus and toyons. The ground plane is barren of groundcover and covered mostly with a leafed mulch material. The left side is taken up by a large natural-looking ravine or arroyo, which represents the last of the territory's open spaces. The scene changes as one travels up the sweeping driveway past a modern-looking restroom facility, located off the driveway. It is from this point that one sees the tall, white courtyard walls that are semi-covered with massings of red flowering Bougainvillea vines. These courtyard walls were built around 1980-81, and enclose the courtyard, a tiled reception patio area and a small fountain. There were many exotic fruit trees removed from this area to make room for the courtyard. Additional plants around the adobe were also removed to help minimize water damage to the adobe walls.

A small parking lot dating from the late 1950s, next to the arroyo, is visible north of the restroom. There is also an adjacent median full of toyon and berry shrubs hanging over the drive. The asphalt forecourt, south of the adobe, provided parking adjacent to the 1931 remodeled entrance to the Bixby residence. Both of these parking areas exist today and provide the only dedicated on-site parking.

Within the historic adobe's U-shape is an inner courtyard. This once-barren work court was laid out by Cornell as a garden retreat incorporating brick walkways, a raised brick terrace, lily pond and a lush lawn area surrounded by landscaping of citrus, sycamores, boxwood hedging, mock oranges and other plantings.

The back garden area, redesigned by Cornell, includes a large lawn area encircled by flowering trees and shrubs. Cornell salvaged many of the original trees from the Temple and Bixby eras. A network of decomposed granite walkways surround the garden with a brick walkway crossing the lawn area between the adobe and country club. A gazebo representing the "summer house" as quoted by Sarah Bixby Smith in *Adobe Days*, was replicated in 1976 from old photos but not placed in its original location. The entire back garden retreat is surrounded by a five-foot high painted brick wall that separates it from the service yard and forecourt. An arbor (1931) extends north of the adobe's veranda, and in 1988, picnic grounds were added to the northwest side of the ranch, adjacent to existing residential properties.

The maintenance yard's perimeter is lined on one side with a six-foot high chain-link fence, old Pepper and Locust trees. A portable trailer is used for collections storage. The area is used for composting green waste and for the storage of mulch, and there is a series of bins for these purposes.

2.3.2 Summary of Architectural Conditions in 1998

The Ranch House, a two-story central adobe structure, is 80 feet long or 102 feet in length including the wooden verandas. The rooms are about 15 feet wide in the interior, with an overall exterior building dimension of 21 feet. From the finished floor to the top of the roof joists, it measures approximately 17'-7". The building's wings measure a rough 143 feet in length. The wings are 15' wide on the interior (the exterior dimension is 19 feet) and approximately 10'-3" high.

Since the initial conservation assessment conducted in 1993, the building continues to be in good structural condition, although it does not meet current seismic code requirements. The walls are built with two and three-foot thick adobe brick walls, plastered with Portland cement and painted. The original adobe was mud plastered and whitewashed. Archaeological investigations carried out by Greenwood and Associates in 1987 revealed the absence of a foundation. The adobe blocks were laid directly on the earth in shallow trenches.

Section 2 - Summary of Resources and Research



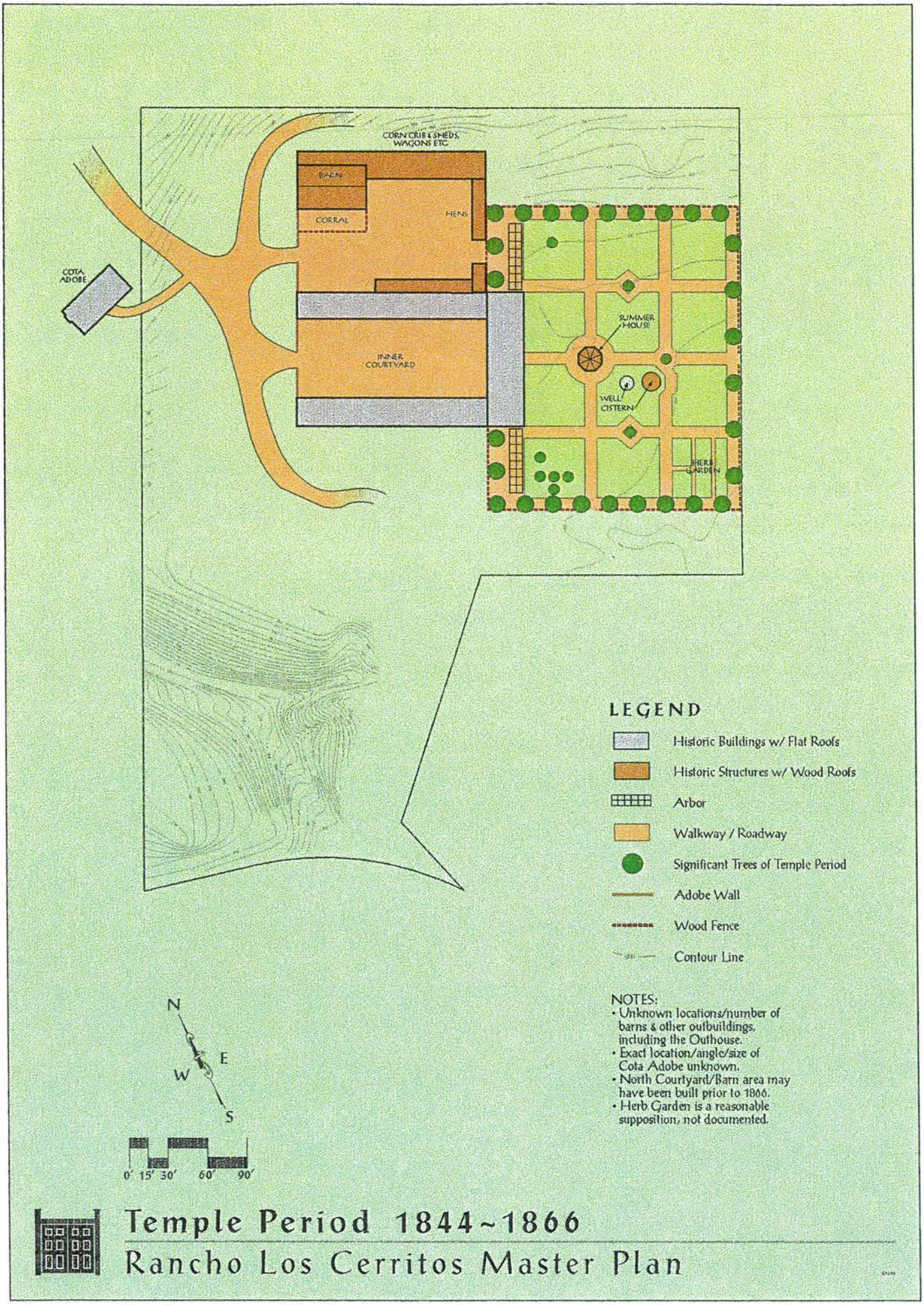
Rancho Los Cerritos veranda. Photograph courtesy of Architect Milford Wayne Donaldson, FAIA.

According to a Historic Structure Report from 1987, the circa 1844 original doors were constructed of redwood. In 1930, several of the original doors were removed and reproduced using Douglas Fir. The entry doors from the courtyard show damage as a result of the wood drying, shrinking and splitting. Over the heads of doors and windows are signs of the "traditional 45 degree crack" which may have been the result of movement caused by seismic activity. With the 1930 renovation, several of the door openings were infilled with fired bricks or replaced with windows.

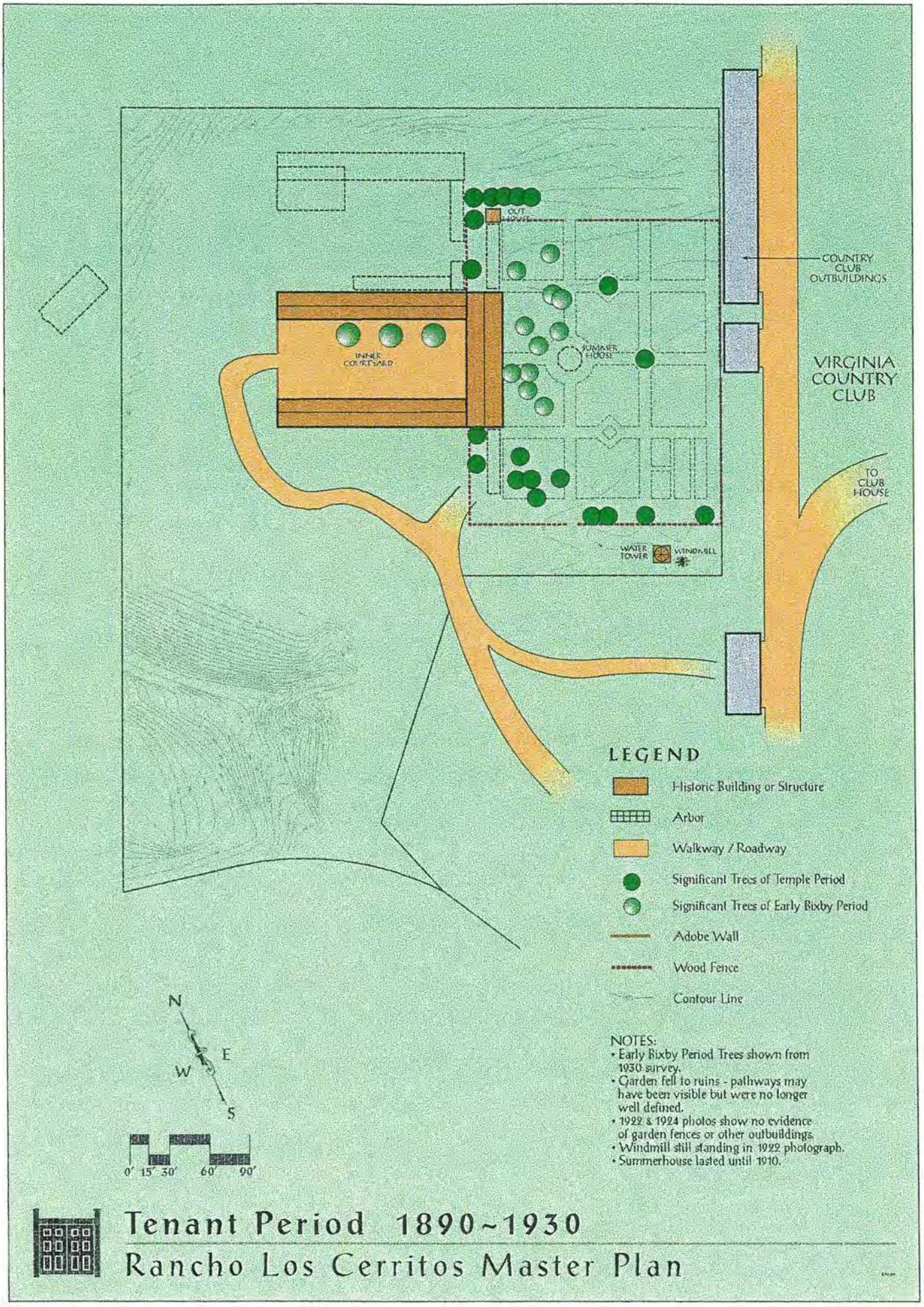
In 1930, an entirely new roof framing system of Douglas Fir was added to the rake of the roof. The original redwood ceiling joists were retained wherever possible and were soaked in creosote.

Four fireplaces were added in 1930, and are constructed of plastered, fired brick. The brick chimney caps show laminated horizontal cracks.

Currently the house is multi-functional providing space for staff offices, the resident caretaker, exhibits, visitor's center, library, archives and collections storage.

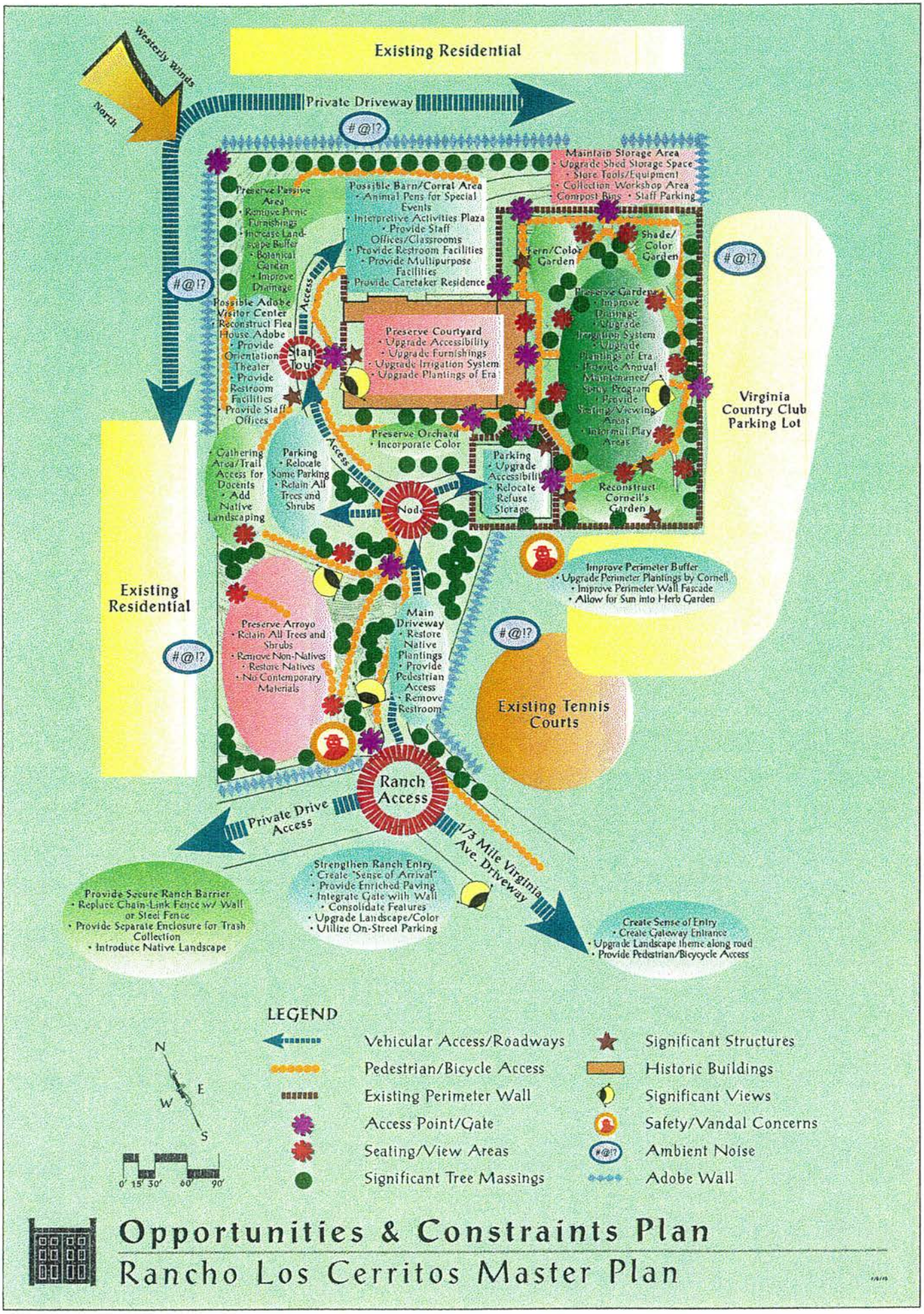

CORN CRIB & SHEDS, WAGONS ETC.
BARN
CORRAL
HENS
COTA ADOBE
INNER COURTYARD
SUMMER HOUSE
WELL/ CISTERN
HERB GARDEN
LEGEND
Historic Buildings w/ Flat Roofs
Historic Structures w/ Wood Roofs
Arbor
Walkway / Roadway
Significant Trees of Temple Period
Adobe Wall
Wood Fence
Contour Line
NOTES:
• Unknown locations/number of barns & other outbuildings, including the Outhouse.
• Exact location/angle/size of Cota Adobe unknown.
• North Courtyard/Barn area may have been built prior to 1866.
• Herb Garden is a reasonable supposition, not documented.
N
E
W
S
0' 15' 30' 60' 90'
Temple Period 1844~1866
Rancho Los Cerritos Master Plan

Early Bixby Period 1866~1890
Rancho Los Cerritos Master Plan
0' 15' 30' 60' 90'
N
E
W
S
NOTES:
• Cistern & Well dismantled 1885.
• Outbuilding information from sketch by Anne Bixby Chamberlin.
LEGEND
Historic Buildings or Structures
Arbor
Walkway / Roadway
Significant Trees of Temple Period
Early Bixby Period Trees
Adobe Wall
Wood Fence
Contour Line
TO ALAMITOS
TO COMPTON
WATER TOWER
WIND MILL & WELL
WOOL BARN
CORRALS
SHEEP DIP AREA
CISTERN WELL
CUMMER HOUSE
INNER COURTYARD
ADOBE TON BAY RGS @
SHED
HORNO
HENS
BARN
CORRAL
OUTHOUSE
CORN CRIB & SHEDS WAGONS ETC.
FLEA HOUSE


OUT HOUSE
COUNTRY CLUB OUTBUILDINGS
INNER COURTYARD
SUMMER HOUSE
VIRGINIA COUNTRY CLUB
TO CLUB HOUSE
WATER TOWER
WINDMILL
LEGEND
Historic Building or Structure
Arbor
Walkway / Roadway
Significant Trees of Temple Period
Significant Trees of Early Bixby Period
Adobe Wall
Wood Fence
Contour Line
NOTES:
• Early Bixby Period Trees shown from 1930 survey.
• Garden fell to ruins - pathways may have been visible but were no longer well defined.
• 1922 & 1924 photos show no evidence of garden fences or other outbuildings.
• Windmill still standing in 1922 photograph.
• Summerhouse lasted until 1910.
N
E
W
S
0' 15' 30' 60' 90'
Tenant Period 1890~1930
Rancho Los Cerritos Master Plan

Bixby / Cornell Period 1930~1954
Rancho Los Cerritos Master Plan
NOTES:
• Final Plan shown was one of three concepts developed by Cornell.
Contour Line
Wood Fence
Adobe / Brick Wall
Proposed Shrub Massings by Cornell
Trees Planted by Cornell
Significant Trees of Bixby Period
Significant Trees of Temple Period
Brick and Stone Paved Walkways
Concrete-DG Walkways/Roadways
A.C. Roadway
Arbors
Historic Building or Structure
Historic Building (Red Tile Roof)
LEGEND
0' 15' 30' 60' 90'
N
E
W
S
VIRGINIA ROAD
ENTRY
DRIVEWAY
NATIVE PLANTING ALONG DRIVEWAY
ARROYO
VIRGINIA COUNTRY CLUB
WATER TOWER
CAPPED OFF WELL
PARKING / FORECOURT
ORCHARD
TO CLUB HOUSE
VIRGINIA COUNTRY CLUB
CLUBHOUSE BUILDINGS
LAWN AREA
LAWN AREA
PADRE JUAN GARCIA TOWER
ROSE GARDEN
FLOWER GARDEN
TRELLIS
INCINERATOR
GARDENERS BLDG
BATH HOUSE
POOL
TERRACE
INNER COURTYARD

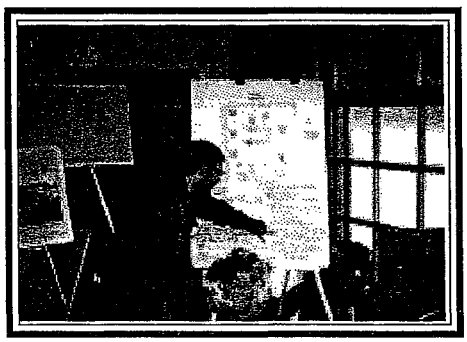

EXISTING RESIDENTIAL
EXIST. RESI-DENTIAL
VIRGINIA COUNTRY CLUB
VIRGINIA COUNTRY CLUB
VIRGINIA COUNTRY CLUB
VIRGINIA ROAD
BOULDER & COBBLE DRYWASH
STORAGE SHEDS
MAINTENANCE AREA
STAIRS
HEDGE
CONCRETE PAD
PLANTER AREA
LAWN
INNER COURTYARD
POOL
TERRACE
SUMMER HOUSE
FOUNTAIN
HERB COURTYARD
PARKING
FORECOURT (PARKING)
TRASH ENCLOSURE
WATER TOWER
HERB & ROSE GARDEN
CAPPED OFF WELL
REST ROOM
ARROYO
DRIVEWAY
ENTRY GATE
N
E
W
S
0' 15' 30' 60' 90'
LEGEND
Historic Building (Red Tile Roof)
Non-Historic Building or Structure
Arbors
A.C. Roadway
Walkway / Roadway
Paved Walkway
Temple Period Trees (1844-1866)
Early Bixby Period Trees (1866-1930)
Bixby / Cornell Period Trees (1930-1954)
Other Significant Trees (1954-1998)
Adobe / Brick / Concrete Walls
Wood Fence
Chain-Link Fencing
Contour Line
NOTES:
• Summerhouse added in 1976.
• Old Watertower rebuilt 1970's with original posts by Parks Bureau Staff.
• A walled-in Courtyard and Fountain replaced Orchard along South Wing in 1980-81.
• Restroom Facility added in mid-1980's.
City of Long Beach Period 1954-Current
Rancho Los Cerritos Master Plan


Existing Residential
Westerly Winds
North
Private Driveway
#@!?
Maintain Storage Area
• Upgrade Shed Storage Space
• Store Tools/Equipment
• Collection Workshop Area
• Compost Bins • Staff Parking
Preserve Passive Area
• Remove Picnic Furnishings
• Increase Landscape Buffer
• Botanical Garden
• Improve Drainage
Possible Barn/Corral Area
• Animal Pens for Special Events
• Interpretive Activities Plaza
• Provide Staff Offices/Classrooms
• Provide Restroom Facilities
• Provide Multipurpose Facilities
Provide Caretaker Residence
Fern/Color Garden
Shade/Color Garden
Preserve Gardens
• Improve Drainage
• Upgrade Irrigation System
• Upgrade Plantings of Era
• Provide Annual Maintenance/Spray Program
• Provide Seating/Viewing Areas
• Informal Play Areas
Possible Adobe Visitor Center
• Reconstruct Flea House Adobe
• Provide Orientation Theater
• Provide Restroom Facilities
• Provide Staff Offices
Access
Staff Tour
Preserve Courtyard
• Upgrade Accessibility
• Upgrade Furnishings
• Upgrade Irrigation System
• Upgrade Plantings of Era
Virginia Country Club Parking Lot
Preserve Orchard
• Incorporate Color
• Gathering Area/Trail Access for Docents
• Add Native Landscaping
Parking
• Relocate Some Parking
• Retain All Trees and Shrubs
Parking
• Upgrade Accessibility
• Relocate Refuse Storage
Reconstruct Cornell's Garden
Node
Improve Perimeter Buffer
• Upgrade Perimeter Plantings by Cornell
• Improve Perimeter Wall Fascade
• Allow for Sun into Herb Garden
Existing Residential
Preserve Arroyo
• Retain All Trees and Shrubs
• Remove Non-Natives
• Restore Natives
• No Contemporary Materials
Main Driveway
• Restore Native Plantings
• Provide Pedestrian Access
• Remove Restroom
Existing Tennis Courts
Ranch Access
Private Drive Access
1/3 Mile Virginia Ave. Driveway
Strengthen Ranch Entry
• Create "Sense of Arrival"
• Provide Enriched Paving
• Integrate Gate with Wall
• Consolidate Features
• Upgrade Landscape/Color
• Utilize On-Street Parking
Provide Secure Ranch Barrier
• Replace Chain-Link Fence w/ Wall or Steel Fence
• Provide Separate Enclosure for Trash Collection
• Introduce Native Landscape
Create Sense of Entry
• Create Gateway Entrance
• Upgrade Landscape theme along road
• Provide Pedestrian/Bicycle Access
LEGEND
Vehicular Access/Roadways
Pedestrian/Bicycle Access
Existing Perimeter Wall
Access Point/Gate
Seating/View Areas
Significant Tree Massings
Significant Structures
Historic Buildings
Significant Views
Safety/Vandal Concerns
Ambient Noise
Adobe Wall
N
E
W
S
0' 15' 30' 60' 90'
Opportunities & Constraints Plan
Rancho Los Cerritos Master Plan

2.4 Community Resources

The Foundation and its consultants facilitated a number of "public involvement" workshops and focus group meetings to gather community input and assistance in developing the master plan. This approach offered several benefits. First, it allowed the project team to gather information from diverse individuals and groups. Such information might not have been available from traditional sources such as plans, special studies and field investigations. Second, it established the framework for an open line of communication between the City, the consultant, the users and the community by clearly setting goals, documenting methodologies, generating ideas, creating alternatives and evaluating solutions.

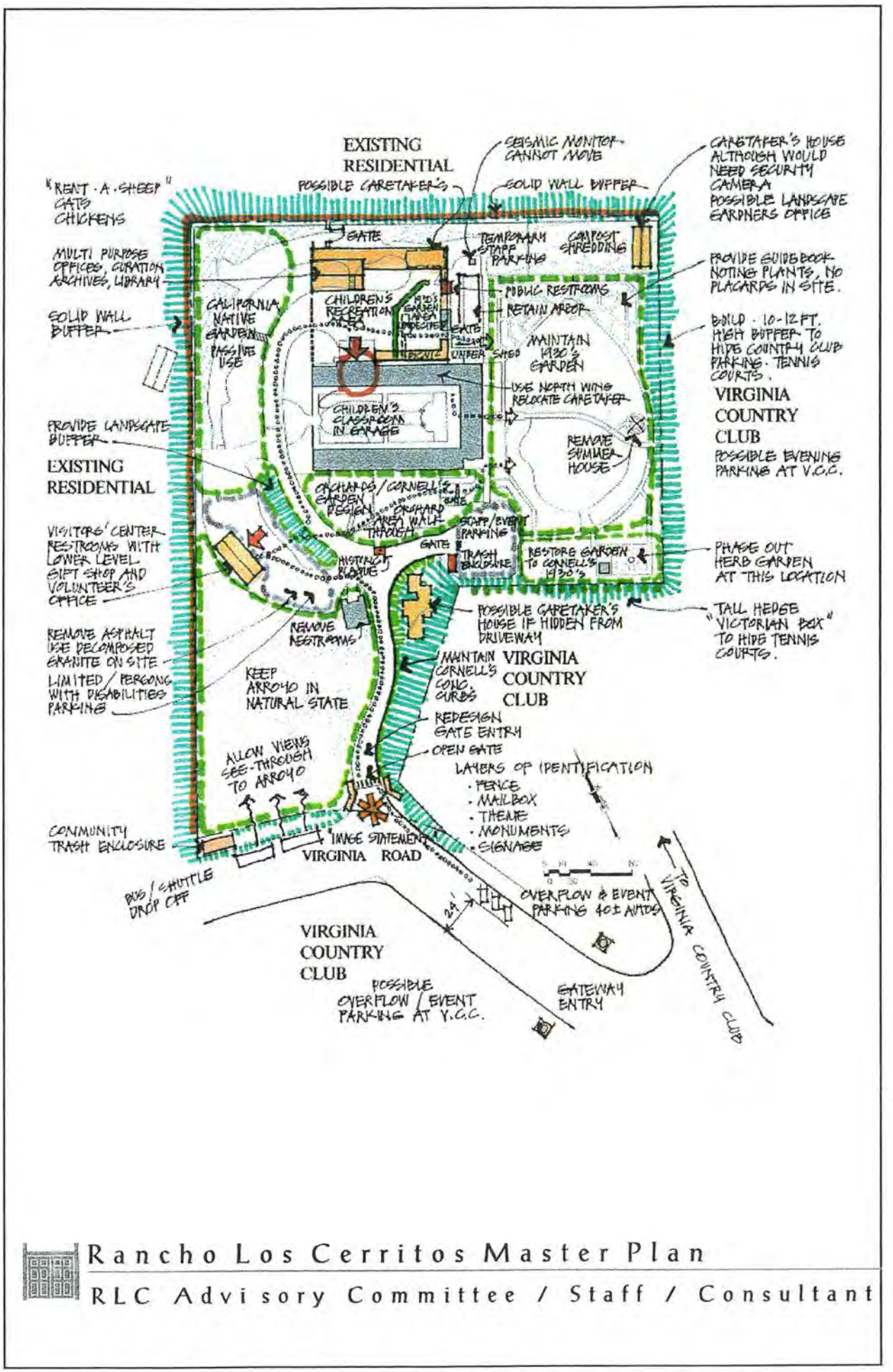




The public meetings were held at the project site. A variety of tools were employed to distribute information and receive feed-back, including the use of photographs, exhibit boards, questionnaires, small group discussions, tours, video tape, and question and answer periods. Participants were asked to develop a comprehensive "wish list" for the site and its uses, regardless of the feasibility or practicality of an idea or thought.

The formal groups included members of the Foundation, the Friends, docents, Advisory Committee, the City of Long Beach, local residents and teachers groups. There were a number of local constituents and area experts involved in these groups, providing very detailed and comprehensive ideas about the ranch and its interpretation.




EXISTING RESIDENTIAL
SEISMIC MONITOR - CANNOT MOVE
CARETAKER'S HOUSE ALTHOUGH WOULD NEED SECURITY CAMERA POSSIBLE LANDSCAPE GARDNERS OFFICE
"RENT-A-SHEEP" GOATS CHICKENS
POSSIBLE CARETAKER'S
SOLID WALL BUFFER
GATE
TEMPORARY STAFF PARKING
COMPOST SHREDDING
MULTI PURPOSE OFFICES, CURATION ARCHIVES, LIBRARY
PROVIDE GUIDEBOOK NOTING PLANTS, NO PLACARDS IN SITE.
PUBLIC RESTROOMS
CALIFORNIA NATIVE GARDEN PASSIVE USE
CHILDREN'S RECREATION AREA
1920's GARDEN PLANTING DIRECTION
RETAIN AREA
SOLID WALL BUFFER
GATE
UNDER SHED
MAINTAIN 1930's GARDEN
BUILD - 10-12 FT. HIGH BUFFER TO HIDE COUNTRY CLUB PARKING - TENNIS COURTS.
USE NORTH WING RELOCATE CARETAKER
CHILDREN'S CLASSROOM IN GARAGE
VIRGINIA COUNTRY CLUB
PROVIDE LANDSCAPE BUFFER
REMOVE SUMMER HOUSE
POSSIBLE EVENING PARKING AT V.C.C.
EXISTING RESIDENTIAL
ORCHARDS / CORNELL'S GARDEN DESIGN
ORCHARD AREA WALL TRELLIS
GATE
STAFF/EVENT PARKING
VISITORS' CENTER RESTROOMS WITH LOWER LEVEL GIFT SHOP AND VOLUNTEER'S OFFICE
HISTORIC BUILDING
TRASH ENCLOSURE
RESTORE GARDEN TO CORNELL'S 1930's
PHASE OUT HERB GARDEN AT THIS LOCATION
POSSIBLE CARETAKER'S HOUSE IF HIDDEN FROM DRIVEWAY
"TALL HEDGE "VICTORIAN BOX" TO HIDE TENNIS COURTS.
REMOVE RESTROOMS
REMOVE ASPHALT USE DECOMPOSED GRANITE ON SITE
LIMITED / PERSONS WITH DISABILITIES PARKING
KEEP ARROYO IN NATURAL STATE
MAINTAIN CORNELL'S CONC. CURBS
VIRGINIA COUNTRY CLUB
REDESIGN GATE ENTRY
OPEN GATE
ALLOW VIEWS SEE-THROUGH TO ARROYO
LAYERS OF (DENTIFICATION
· FENCE
· MAILBOX
· THEME
· MONUMENTS
· SIGNAGE
COMMUNITY TRASH ENCLOSURE
IMAGE STATEMENT
VIRGINIA ROAD
BUS / SHUTTLE DROP OFF
OVERFLOW & EVENT PARKING 40± AUTOS
TO VIRGINIA COUNTRY CLUB
VIRGINIA COUNTRY CLUB
POSSIBLE OVERFLOW / EVENT PARKING AT V.C.C.
GATEWAY ENTRY
Rancho Los Cerritos Master Plan
RLC Advisory Committee / Staff / Consultant

2.5 Potential Attendance and Marketing Opportunities

A number of other historic park facilities were visited by the consultant team. A Potential Attendance and Marketing Opportunities report was established in order to assist the Foundation to compare data with similar historic facilities.

A summary of the data requirements included admissions, structured programs and funding sources. Interviews with principal staff members were also conducted.

The facilities included:

- Rancho Los Alamitos, Long Beach, CA
- Leonis Adobe, Calabasas, CA
- Olivas Adobe, City of Ventura, CA
- Avila Adobe, Los Angeles, CA
- Hugo Reid Adobe, Arcadia, CA

2.5.1 Findings

Listed are key characteristics that were indicated by facility staff to have increased the attendance of the surveyed historic adobe sites:

A. Strong interactive programs that directly involve visitors in learning about the history of the adobe. These programs include daily guided tours, interaction with livestock, carriage rides, short films, and craft making. In particular, interactive programs for children incorporating activities such as tortilla making and adobe brick making were important features at facilities with successful children's programs.

B. Program emphasis on special events that increase community involvement and awareness. At all sites surveyed, special events were held throughout the year. However, some sites held programs more often and generated revenue from special events. In particular, events that were cited as being successful were those focused on members of the community such as musical performances by local musicians or art shows with local artists. Some of these events were not directly relevant to the history of the site, but staff indicated that these types of events increased revenues compared to prior years.

C. Programs designed specifically to draw from broad sectors of the community, not exclusively focusing on children and seniors. For example, recent increases in visitation and revenues at one site were attributed to special events such as Silent Movie Night (where local musicians created their own musical score to go with the movie) and Musical Festival (where local musicians performed and visitors could picnic in the courtyard). These programs were cited as being key to providing a more demographically diverse visitor and volunteer base.



Section 2 - Summary of Resources and Research

D. Use of local media such as the Convention and Visitors Bureau, newspapers, and magazines. Several sites indicated that taking advantage of opportunities with the local media was an important factor increasing community awareness.

E. Commercial uses of the property were also cited as important sources of revenues as well as publicity for the site. The majority of the sites visited rented their grounds for weddings, parties, or film shooting.

2.5.2 Factors Influencing Attendance and Marketing Opportunities

A. Marketing

1. Free advertising promotions through the local Convention and Visitors Bureau, radio stations, the City of Long Beach publications, and the internet are encouraged.
2. Highly visible signage at closely located major intersections is important in identifying the proximity of Rancho Los Cerritos and in creating curiosity about the site.

B. Attendance

1. Strong program content is an important factor in increasing attendance to the site. Programs that encourage repeat visitation are highly important in creating a strong market draw from the local community.
2. Programs that appeal to a variety of age and ethnic groups are also important in encouraging visitation.
3. Special events such as those that focused on the unique history of the adobe are an important factor in maintaining the historical integrity of the site.

The success of Rancho Los Cerritos will be the ability of the Foundation, Rancho Los Cerritos management and the City of Long Beach to negotiate a viable program for commercial use of the site and to develop an innovative special events program, while still maintaining the historical integrtiy of the site.

SECTION THREE

THE INTERPRETIVE PLAN

SECTION THREE • THE INTERPRETIVE PLAN

3.0 INTERPRETIVE PLAN

3.1 Interpretive Objective

The interpretive plan for Rancho Los Cerritos is designed to be used as a decision-making tool and implementation guide, as well as an effective marketing tool for fundraising. All proposed programs, events and activities should be compared to the central theme to verify that they are appropriate and will further reinforce the Rancho's identity.

The interpretation of Rancho Los Cerritos will address the lives of its occupants and their relationship to the site based upon the following objectives:

- Establish a balance between preservation and presentation.
- Maximize the existing natural and historic features of the site.
- Develop visitor support facilities and programs to ensure the site's integrity in portraying the past in relationship to the present and future.
- Provide an active learning environment and interpretive vehicle.



Current Visitor's Center. Photograph courtesy of Architect Milford Wayne Donaldson, FAIA.

Section 3 - The Interpretive Plan

3.2 Themes and Sub-Theme

3.2.1 Rancho Los Cerritos: Gateway to the Past

In keeping with the Mission Statement of Rancho Los Cerritos as established in the NEH study, the central theme of Rancho Los Cerritos will be "Rancho Los Cerritos: Gateway to the Past," revealing the story of Long Beach's first home through the diverse peoples who lived and worked on the land and their contributions to the development of the greater Long Beach area. The multi-national, multi-cultural history of Rancho Los Cerritos allows the site to explore Native American, Spanish and Mexican contributions, as well as the contributions and inter-relationships of Anglos and many different ethnic groups including the Irish and Chinese after California became a part of the United States.

The primary interpretive method will be through "Visitors from the Past," or living history characters who come forward in time to share their stories. On any given day the visitor will select from a menu of tours, one time exploring the site with its builder John Temple or one of his laborers, another time visiting with Grandfather Hathaway, Ying the cook, a tenant from the early 1920s, or perhaps Sarah Bixby Smith as she spends time with her brother's family after Llewellyn remodels the house. Yankees and Dons, Native American laborers and Basque sheep herders, women and children can be represented, insuring that the stories are as rich and diverse as the history of this region.

Along with carefully researched information and well crafted script outlines, interpreters will dramatically depict a historic chapter in the site's history. This format allows for an exploration of an endless variety of issues and perspectives. Some interpreters will portray owners or family members and guests, tenants or laborers. Since people experience history and objects very differently depending on their ethnic background and social standing, returning visitors will be able to appreciate the cultural diversity of the people associated with the site. Visitors will be challenged to understand their personal views, to consider inter-relationships with others in the community, and to understand connections between their economic and social activities and the growth of Long Beach.

The interpretive plan identifies additional sub-themes that relate to the site, and proposes a variety of appropriate programs and events. These sub-themes deepen the visitor's experience and provide lasting benefits to society.

A. Home

Rancho Los Cerritos was home to owners and workers who helped develop the greater Long Beach area, and was also "home" to several area cities—the place where Long Beach, Lakewood, Bellflower, Paramount and Signal Hill began.

"Rancho Los Cerritos: Gateway to the Past" utilizes this theme of "home" to tell the broad story of the early periods of the Rancho and its grounds. It also provides for the expansion of "home" to the development of Long Beach. Rancho Los Cerritos provided a "home" for one of the first families of Long Beach and for those who would later have a part in developing the City and several neighboring cities. While the main artifact, the house of the Rancho, appears outwardly as it did in 1930, rooms in the wings will open doors to earlier periods in the history of Rancho Los Cerritos and Long Beach.

These gateways will help place the site and the visitor in the regional context of time and history, while maintaining a central theme of "home." The Rancho was, in fact, a home to not only the prominent families who owned it, but all who worked, lived, and visited there throughout the four selected time periods. With this concept the Interpretive Plan will be able to cover a wide expanse of time, presenting the perspective of a number of individuals regarding the development of the Rancho and Long Beach, but still maintaining a "Welcome to *Our* Home" feel. For current residents of Long Beach, it also provides a sense of "ownership" in the site and its related history.



Sharing "family photos" during a school program activity. Photograph courtesy of Architect Milford Wayne Donaldson, FAIA.

B. Land and Economic Growth

The land as a pastoral, agricultural and mineral resource shaped the lives of Rancho Los Cerritos residents and the developing community.

The 27,000-acre Rancho Los Cerritos, carved from Nieto's enormous land grant, provided vast resources and opportunities for economic growth and change. From the original pastoral environment inhabited by Native Americans in harmony with their surroundings, successive owners exploited the land for ranching operations, agriculture, and eventually townsite and city development. Today, the Rancho encompasses only 4.74 acres of land and is surrounded by urban development.

C. Social and Cultural Diversity

Owners, workers, and guests at Rancho Los Cerritos reflected the social and cultural diversity of Southern California and made many contributions to the development of the area.

At Rancho Los Cerritos, it was Native Americans who mixed the soil and molded the adobe blocks for the two-story adobe. Native Americans and Mexicans served as vaqueros, herding cattle first for their hides and tallow and later driving them north to feed the miners. Among those in Jotham Bixby's employ were Irishmen, Basques, Chinese, Portuguese, Mexicans and New Englanders. Mexican families again occupied the house as renters and boarders in the early 1900s; and others worked as servants for Llewellyn and Avis Bixby in the 1930s.

Section 3 - The Interpretive Plan



Entrance drive. Photograph courtesy of Architect Milford Wayne Donaldson, FAIA.

3.2.2 Initial Orientation to the Site

The initial impression of the visitor to the site is an important one. The landscaped entry, drive and parking lot should reflect the tradition of the site.

A. The gateway entrance should welcome the visitor to the site in the historic tradition of arrival at an early California ranch.

B. Aesthetically designed markers will be erected to inform visitors that they are approaching Rancho Los Cerritos. These markers will include the Rancho's name, "Gateway to the Past," and gate logo.

C. The parking and bus drop-off will provide the first pedestrian orientation for those traveling by motor vehicles. Parking spaces will be limited in order to enhance the feel of being in a rural setting. Street parking as well as shuttle services will be provided from other parking lots within the area.

D. The gateway should maintain a secured entry and emergency service access.

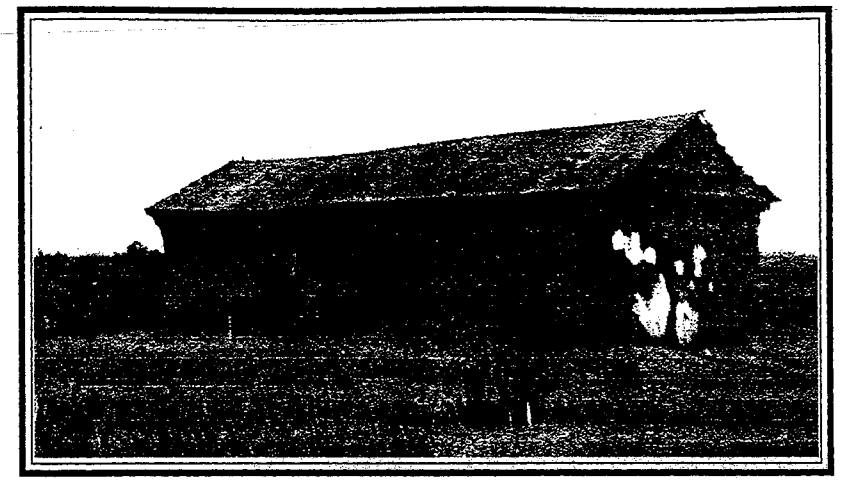
E. Automobiles, buses, and shuttle service will be limited to the actual parking area. Only maintenance, delivery, staff vehicles and emergency/fire services will have access into other areas of the site.

F. Appropriate signage will assist visitors to orient themselves to the site.

1. For those walking up from Virginia Road, low interpretive signs along the west side of the driveway, overlooking the arroyo, will help visitors place themselves in the time and context of the site.
2. Orientation signage should also be considered in the Forecourt area, for those parking on-site.



Directional sign. Photograph courtesy of Architect Milford Wayne Donaldson, FAIA.



Cota adobe, date unknown. Photograph courtesy Rancho Los Cerritos Collections, CHP0249.

3. Interpretive signs at the "staging area" adjacent to the Visitor's Center will continue the story. Beginning with the entry, interpretive signs will flow into the storyline that will be shared in the Visitor's Center.

3.2.3 Integrity of the Site

The integrity of the site and its buildings reveals aspects of the City of Long Beach's origins and development through their form and features and the ways they were used. The cultural landscape component is integral to the significance of Rancho Los Cerritos. In order to maintain the integrity of the site, the following treatments are recommended:

A. Reconstruct the Cota adobe as the Visitor's Center/Gift Shop.
B. Reconstruct the barn complex for use as staff offices, library, archives, collections storage and meeting area.
C. Provide a caretaker's residence to provide better security and free the ranch house for exhibits.
D. Remove the Spanish courtyard area and reintroduce Cornell's orchard.
E. Remove the herb garden and reconstruct Cornell's garden design to the south of the lawn area.
F. Reconstruct new barnyard including fencing, ramada and other associated features for special events.

Since most existing structures are considered to be historic and of great value to the contextual setting of the site, it is important that the structures continue to be maintained and utilized in "telling the story." Additional research should be conducted to locate artifacts and furnishings to accommodate all significant periods. A local and nationwide search for possible donors of items will need to be conducted.

The site's plant palette will be made up of plant materials used during both Temple and Bixby/Cornell's time periods. The recommended plant materials are included at Appendix 5.6. The site's theme should be continued by using indigenous and historic landscape materials.

General commercial uses and facilities on the site are not recommended. However, organized commercial programs with approved sponsorship and volunteers could be scheduled throughout the year to foster interest in the site, and to help with funding of the maintenance and restoration of the site.

Section 3 - The Interpretive Plan



3.2.4 Overview of Primary Interpretive Experience

The general public will park on site in the Forecourt, or drop passengers off in front of the Visitor's Center and park on Virginia Road. For visitors walking up the drive from Virginia Road, interpretive signage along the arroyo pathway will provide information on the Native Americans who once occupied Rancho lands. This signage could include a chronological timeline to help visitors understand the site's place in history, from Native American times through the present, using recognized world, national and local events to further expand and illustrate the context of the Rancho.

The Master Plan calls for the reconstruction of the old Cota adobe, a pre-1834 adobe, for use as the new Visitor's Center. All visitors to the site will stop here first for the following visitor services: an orientation video in a mini-theater, interpretive exhibits in the gallery, and the Museum Gift Shop. Public restrooms will be available adjacent to the Visitor Center.

The orientation program should be about 7-12 minutes long and will provide context for the living history tours. A longer version of the video may be used to inform off-site groups and potential donors about the specific purpose and significance of the site. The video should also be incorporated into Educational Trunks with supporting reproduction documents for use in outreach programs to schools or other institutions. The full-length video should also be made available for sale in the Museum Gift Shop.

On any given day, visitors will select from one of several guided tours with a "Visitor from the Past." These interpreters will assume the roles of owners or workers from each of the key time periods and their tours will provide visitors with one chapter of the site's history. Pre-1930s characters will take visitors through the main courtyard gates to begin their tour by the foreman's room. Characters from the 1930s and 1940s will use the 1930s entrance as the starting point for their tours.

Tours will proceed through those rooms and interpretive areas appropriate to the character and his or her interpretive themes. For instance, the 1930s gardener will spend most of his time in the gardens and in the North Wing work areas; the Chinese cook will focus on areas relevant to his domain: storerooms, the kitchen, dining rooms and barnyard. The interpreters will weave stories based on historic themes, their characters, room exhibits and the buildings and grounds, illuminating the past and emphasizing issues relevant to modern times. Although "from an earlier time," interpreters will be able to acknowledge modern changes and, if appropriate, comment on use of space, lifestyle and furnishings to provide comparison and contrast for the visitor. Throughout the tours, interpreters will seek to engage visitors in discussion and thought.

Each tour will utilize the three main interpretive areas in different patterns as it focuses on only a chapter of the entire story. All three areas relate back to the central theme of "home" in some aspect, and viewed together they give a clear picture of what the Rancho "home" was like for every individual throughout the four time periods. Collectively they also provide insight into how Rancho Los Cerritos "made Long Beach" or Long Beach "made Rancho Los Cerritos." The separate stories from each of the time periods, interwoven, provide perceptions of a home and land in transition through contrast and comparison.

At the end of each tour, visitors will have the option to sign on for a second tour, browse the Visitor's Center exhibits and Museum Gift Shop, explore the formal gardens and grounds, or enjoy a picnic lunch before departing for home.



Section 3 - The Interpretive Plan

3.3 Interpretive Areas

The three working interpretive areas are: the Adobe (the house); the Gardens (both the formal garden to the east of the adobe, and the inner courtyard); and the proposed barn complex and barnyard area. Additional interpretation will take place at the entry and along the arroyo, in the Visitor's Center, and in the Native California Garden.

A. The Adobe (Ranch House)

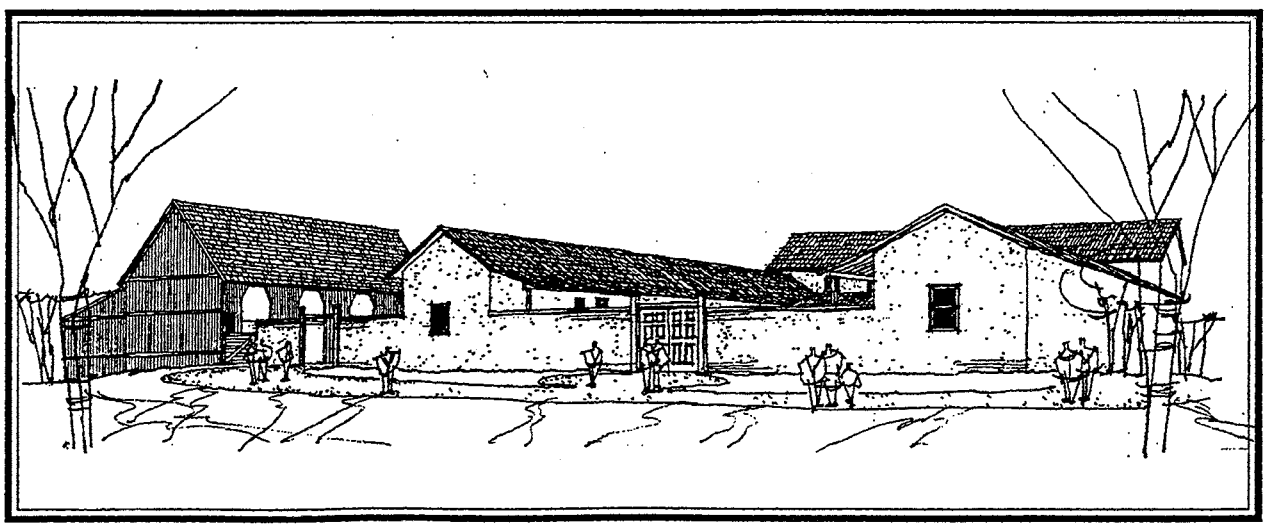
The interpretive approach to the house is that of a home. The many lives and families that lived within the house provide a library of resource material for the interpretive program and scripts. "Visitors from the Past" interpreters will present these various stories to modern day visitors as they guide them through the house. The stories connected with the various rooms and aspects assist the touring public to put historic data into contextual family settings.

B. The Gardens

The gardens and the grounds are an interpretive experience that may be enjoyed on garden-only tours, as a self-guided adventure, or as part of one of the "Visitors from the Past" tours. The interpretation may focus on regional and cultural connections, lifestyles, and changes brought about by economics, commerce, weather and land development. Additionally, environmental issues of climate, water, change, land development and use of the Rancho and the surrounding area may be addressed through garden and grounds tours and museum publications.

C. The Barns Complex and Barnyard

Reconstruction of the nineteenth century barns complex with its barn, shed, corrals and barnyard, is a critical component of the Master Plan. The outdoor area will support the 1860-1870s storyline with its physical appearance, furnishings and activities, and the indoor space will provide a much needed modern assembly room for lectures, workshops, films, temporary exhibits, community groups and special events.



Ranch House and Barn.

3.4 Interpretive Media

3.4.1 Tours

A. Tour Size

Tour groups vary in size; however, due to the small size of rooms in the adobe, the ideal group size for a house tour is 10-12. School groups with young children may have 15 students per tour. The barnyard area can accommodate larger groups of 20-25 per interpreter. Garden tours should also be limited to 10-12 so that visitors can hear the guide.

Workshops comfortably can handle 20 - 25. Lectures will hold as many as the room will comfortably accommodate.



Leather/tooling activities at Rancho Los Cerritos. Photograph courtesy of Architect Milford Wayne Donaldson, FAIA.

B. Tour Frequency

1. "Visitors from the Past" tours - offered daily
   Initially, tours with two-three first-person characters should be offered on a daily basis during public hours. These numbers can expand as the program matures. Depending upon staffing resources and popularity, tours may be offered on the hour or on the half hour. Characters should be varied week by week or month by month in order to offer new program options to returning visitors.
2. Self-guided tours - offered daily
   Self-guided tours of the main garden and barnyard area could be available on a daily basis. These would require interpretive maps and brochures which contain factual data (dates, significant plant names, etc.) and social information (people, culture). To safeguard historic collections and avoid interruption of character tours, self-guided tours of the house should never be permitted.
3. Theme Tours – third person; offered as resources permit and by appointment
   Third person guided tours should focus on specific themes such as comparison/contrast and architecture. These may be offered as a daily alternative, or by appointment.



RLC Players. Photograph courtesy of Rancho Los Cerritos

Section 3 - The Interpretive Plan

3.4.2 Secondary Interpretive Treatments

Additional alternative tours include an abbreviated tour of the house and grounds, giving visitors a third-person "sample" tour to inform them of what the site is about and the many complex, fascinating and educational stories and opportunities provided by the site.

Special themed tours are another option. For instance, an "Architecture and the Land" tour would focus on the construction of the adobe, changes during the different periods, and changes and designs in the gardens. These tours could be done in third-person or first-person, with a 1930s architect/landscape architect and/or a Native American who helped build the original adobe house.

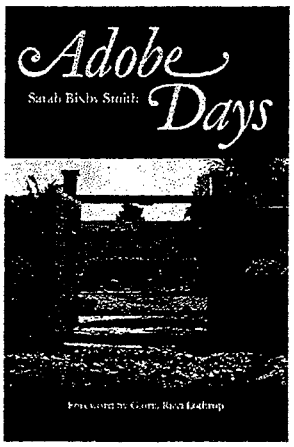
"The Working Rancho" is another theme tour that can be developed as either a first-or third-person tour. This would concentrate on the barn/corral areas and the businesses of both Temple and Bixby in the nineteenth century, cattle versus sheep, climate changes, economic changes, and land development.

Audio tours are another option, although technical difficulties with audio tours are always a consideration. New technology has eliminated most technical problems but has also increased the cost. An audio tour would allow the listener several options to choose from such as Factual Data, Social History, Folklore, and Horticulture. This option is the least preferred.

A special interactive interpretive area in the barnyard area might be included for all visitors to explore at their leisure following, or instead of, a tour. The interactive interpretive area should deal with the "working" Rancho of the Temple/Bixby period. In addition to a permanent adobe pit area, harnesses, saddles, and the other paraphernalia used in the "daily" workings of the Rancho could be available for the public to touch, handle, and try their hand at, i.e. adobe brick construction, harness rigging, saddles, and rope handling. Perhaps some of these exhibits could be built into the sides of the sheds, with barn doors that pull down to close them off when desired.

3.4.3 Formal Educational Programs

A. *Adobe Days Revisited*



The proposed Interpretive Plan allows the existing fourth grade school program, *Adobe Days Revisited*, to continue with some modifications. These modifications include the use of the North wing classroom as an orientation area and for the current "library component;" moving of all hands-on activities and games to the barnyard area; and the elimination of upstairs bedrooms from the tour. However, children will be able to go upstairs to the veranda area to view and discuss the gardens. Several rooms in the North wing will become available for the guided house tour component.

The house tour would begin at the courtyard gates and proceed up the South wing, skip the Library, enter the "Half Parlor" and Dining Room, go upstairs to the veranda, and then visit the 1870s Kitchen and possibly Ying's room. Concluding options might be to proceed to the Milk Room from the barnyard side. Chores would take place in the barnyard and, in addition to current activities such as butter churning and tin punch, cooking, weighing of wool, working with plants or learning how to harness an animal could be added to the program.

B. Additional Programs, K-12

The goal of the History and Social Science Content Standards for the Long Beach Unified School District is to promote lifelong learning, critical thinking, informed decision making and respect for cultural diversity in all students to ensure participation as active, productive citizens in a democratic society.

The following standards are relevant to the stories of Rancho Los Cerritos:

1. Sociology
2. Historical Perspective
3. Cultural Anthropology
4. Relationship of Geography to Human Activity
5. Regional and Local Economics



School tour activities. Photograph courtesy of Architect Milford Wayne Donaldson, FAIA.

C. College and University Level

Rancho staff should continue to encourage college-level internships, both paid and unpaid, to provide career development opportunities for students. Subjects such as History, Ethnic Studies, American Studies, Public History, Geography and Architecture lend themselves to specific research and writing projects. Theater Arts students could help develop characters and historical scripts, as well as serve as "Visitors from the Past" interpreters. Students in Teacher Training Programs could be encouraged to help develop new school program initiatives, as well as volunteer as school tour docents to gain experience working with children. The Rancho could collaborate with the Art Department in creating new brochures and other published materials.

Faculty should be encouraged to use the Rancho's California History Research Library and Archives, and to teach field classes at the Rancho on relevant topics such as architecture, landscape history and local and regional history.



Section 3 - The Interpretive Plan

D. Adult and Continued Education Programs

Long Beach's Regional Occupational Program (ROP) provides the Rancho with opportunities to train adults in horticulture and landscape maintenance.

The Rancho's meeting room could be used for adult education classes.

3.4.4 Frequency of Programs

The frequency of a program will depend upon how well it is received by the audience. A lecture series may run for three to six months, with lectures occurring once a month. Seasonal programs tied to Autumn, Winter, Spring and Summer are also popular as each quarter of the year offers a different venue for activities.

Workshops tied to Christmas, Thanksgiving and other ethnic holidays are always popular with the public. Likewise children's events, such as a "Breakfast with St. Nick" or an Easter Egg Hunt, are popular and can be linked back to the overall interpretive theme of "home" and tied into known historical practices at the Rancho.

Documentation should be kept on each program. Pilot programs need to run at least three seasons. If by the third season the program has not grown or shows signs of weakening, it should be dropped. Conversely, if the program continues to grow, staff should expand it by adding something new each year and documenting changes and public reaction to those changes.

3.4.5 Additional Interpretive Programs

A. Theater

The Rancho currently includes theatrical programs in its annual calendar of events. These have included one-person performances, productions by the Rancho Los Cerritos Players and formal Chautauquas in conjunction with the California Humanities Council. Additional theater presentations should be added so that the Rancho becomes known for exciting historical theater as well as its living history/theatrical tour program. Utilizing the raised brick patio in the inner courtyard and the Moreton Bay Fig in the main garden provide lovely settings for theater.

The museum should continue to book quality, living history/theater performances, and may choose to work with interested volunteers or college theater programs to develop special plays related to the Rancho's stories. As mentioned above, the Rancho should also collaborate with college and university Theater Arts Departments to develop historical characters and costuming for its "Visitors from the Past" program.

B. Story telling

For the same reasons as those for expanding theater offerings, Rancho staff should encourage programs centered on storytelling. This will enable the Rancho to share both family stories and Native American lore and to reach groups who may not be interested in a tour.



Docents as" Visitors from the Past" telling the story. Photograph courtesy of Architect Milford Wayne Donaldson, FAIA.

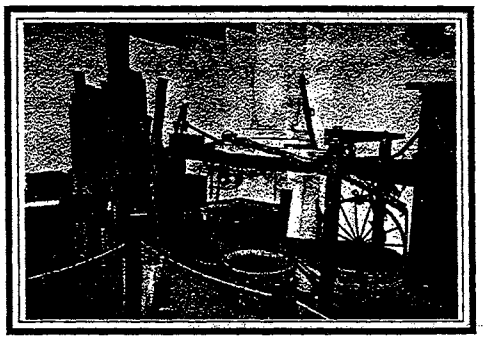
3.4.6 Changing Exhibits

A changing exhibit area should be available either in the new Visitor's Center or in the barns complex. As the exhibits change, special tours/activities could be composed to highlight various hidden elements of the Rancho or elements pertaining to current issues. These exhibits and added tours would enhance a visitor's understanding of the Rancho's history and help to place it within historical and modern-day context. Some examples include:

1. An exhibit on the environment detailing the disposal of waste products, procurement of clean water, and population growth in the Temple period, as compared with those same issues in today's world. By examining how these issues were dealt with in Temple's period, changes that occurred as the population grew and the Bixbys purchased the Rancho, and how Long Beach currently deals with such problems, the visitor is made aware of how much history changes yet remains the same.

2. An exhibit on immigration, discussing the many cultures represented through the Rancho's history and their numerous contributions to the development of our State, and examining changing attitudes towards immigrants, i.e. the Chinese Exclusion Act. This could be brought up to date with a look at recent attempts to stem immigration in California.

3. An exhibit on the dairy industry. Beginning with Marcellus Bixby and his dairy cow operations, the exhibit would trace the establishment of dairy farms in the area once Rancho Los Cerritos ceased sheep ranching and began to lease and sell land. It would look at the Bixby family's dairying enterprises and the affects of hoof and mouth disease on the industry in the 1920s. Finally, it would examine the closure of Long Beach's last working dairy lands, behind Paul's Dairy, and look at the clash between agriculture and growth.



Blacksmith Room. Photograph courtesy of Architect Milford Wayne Donaldson, FAIA

The new library reading room area should also include an exhibit case where new or significant books and photographs can be showcased.

Section 3 - The Interpretive Plan

3.4.7 Demonstrations

Demonstrations are commonly included in major special events. The staff should consider offering demonstrations on a daily basis, either in some of the rooms of the adobe or in the barnyard. These could include baking in the horno and making adobe bricks in the barnyard, making cheese in the Milk Room, or ironing clothes with non-electric irons in the Laundry Room. Demonstrations can also be used to focus on specific cultural groups, i.e. to highlight aspects of Native American life, volunteers could demonstrate basket weaving, grinding of acorn for meals and cooking.



The "Mud Mania" event allows children to "experience" building with adobe material. Photograph courtesy of Architect Milford

3.4.8 Outreach Programs

"Educational Trunks," programs loaded in suitcases or Rubbermaid boxes that cover specific learning material, are great outreach programs. The Rancho has currently developed one such traveling trunk as an alternative to its *Adobe Days Revisited* program.

The development of additional trunks that can be used in classroom settings, or even at the Rancho by families, should be considered. Each trunk might include a video or slide presentation (though cheaper to produce, slide projectors are increasingly scarce in the Long Beach Unified School District), reproduction documents, artifacts and an instruction booklet for the teacher or user.

The Rancho might develop a series of Educational Trunks that represent a specific time period and/or character from the Rancho. Examples might be the Foreman from the Temple period, and the trunk would include samples of his clothing, a bedroll, a rope-making activity, maps of the Rancho, and a storyline that instructs and educates students to his life at the Rancho. Other cases can illustrate the lives of:

1. A Vaquero, from the Bixby Period, with wool, carding tools, maps, clothing, tools for shearing, and a storyline.
2. Ramona Lopez, from the Tenant Period, with a sample menu, a map of Long Beach, letters telling of visitors who stayed at the Rancho, and a ledger of expenses and revenue.
3. Avis Bixby, from the Bixby-Cornell Period, with a list of social activities, letters, City Directory, clothing, and information on flowers and gardens.

3.4.9 Lectures and Workshops

The Rancho currently offers a series of lectures or workshops each year, usually based around a particular theme (i.e. conservation or horticulture). Once the barn is built, a permanent space will be available for larger lectures and workshops that can be offered during public tour hours and/or evenings. The Rancho should continue to present quality programs on Rancho history, genealogy, horticulture, oral history, folklore and other issues. Hands-on workshops, such as wool and weaving, flower etiquette and arranging, Native American folk art and crafts, and other period-related subjects should also be continued.



History lecture. Photograph courtesy of Architect Milford Wayne Donaldson, FAIA.

3.4.10 Youth Programs

Opportunities for quality educational programs geared for youth are numerous, and include Summer Workshops, a Junior Docent Program and Theater Workshops. Summer Workshops will help meet the community's need for both day care and affordable, quality programs. Utilizing the museum's many resources, they could focus on historical themes and the diverse cultures that helped build Southern California. Some ideas include:

1. "From Ranchos to Cities" – a community's growth and evolution is examined, using Rancho Los Cerritos as an example of land use evolving from ranching to agriculture, and then to housing, industry and business.

2. "Journeymen Days" – old-fashioned hands-on skills are learned when youth act as journeymen for different historic trades such as woodworking, blacksmithing, leather tooling, cooking and map making.

3. "History Camp" – the Rancho could offer a week-long program exploring different periods of the Rancho's history on each day: Native American, Spanish, Mexican, American Expansion/Victorian Era and Twentieth Century.

Section 3 - **The Interpretive Plan**

3.5 Interpretive Impact Analysis

The following is a brief analysis of the impact upon the site and interpretive programs of Rancho Los Cerritos by the installation of the following site improvements:

A. Rancho Entrance, Driveway and Parking Lot

Access to the site should be slightly modified in order to reflect the tradition of an early California ranch entrance and to help the visitor experience the passing through time to another era. Parking spaces shall be limited so visitors can orient themselves to the site without "modern day" distractions. The majority of the parking will be provided off site along Virginia Road. Major events will employ shuttles to and from the site from an area parking lot.

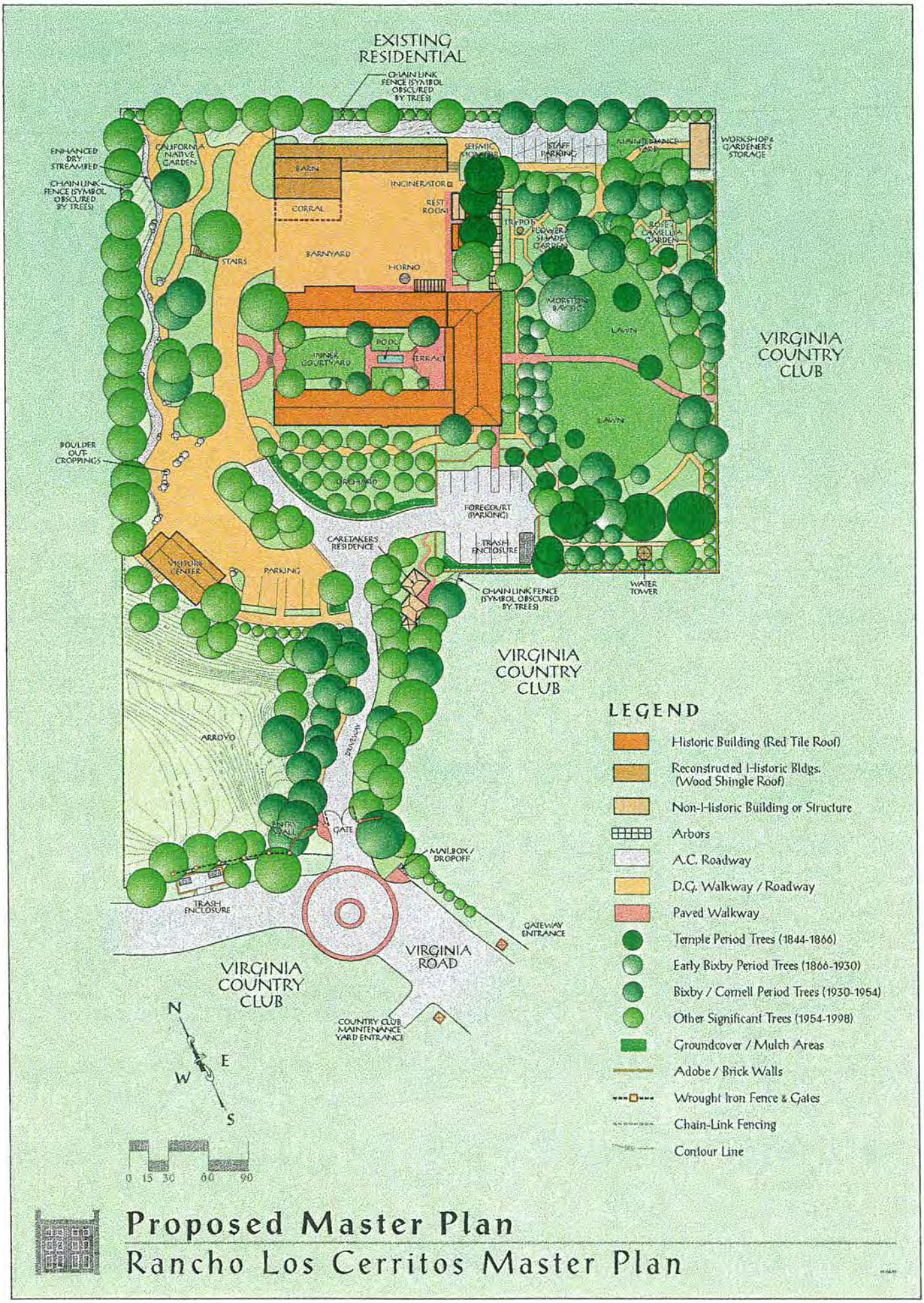
Security through the use of surveillance cameras will be provided at the entrance. An eight foot high black chain-link fence will be installed around the perimeter for security. The chain-link fence will be surrounded by landscaping and not visible. New landscaping appropriate to the site will eventually buffer the adjacent properties.

The parking lot adjacent to the Visitor's Center will be paved with a stabilized decomposed granite surface and create a number of convenient access opportunities to the site. School and tour bus drop off will be provided at the parking lot. The buses will return to Virginia Road, park and wait until the tour is over.

B. Extension of Paved Areas

The extension of the maintenance road will provide access to staff parking located at the northeast end of the site. This parking area will allow easy admittance to the new barn facility and barnyard.

SECTION FOUR
MASTER PLAN RECOMMENDATIONS


EXISTING RESIDENTIAL
CHAIN LINK FENCE (SYMBOL OBSCURED BY TREES)
ENHANCED DRY STREAMBED
CHAIN LINK FENCE (SYMBOL OBSCURED BY TREES)
CALIFORNIA NATIVE GARDEN
BARN
INCINERATOR
REST ROOM
CORRAL
BARNYARD
STAIRS
HORNO
SEISMIC MONITOR
STAFF PARKING
MAINTENANCE YARD
WORKSHOP & GARDENER'S STORAGE
TRIPOD
FLOWER SHADE CANOPY
ROSE / CAMELLIA GARDEN
MORETON BAY FIG
LAWN
INNER COURTYARD
POOL
TERRACE
VIRGINIA COUNTRY CLUB
BOULDER OUTCROPPINGS
ORCHARD
FORECOURT (PARKING)
CARETAKER'S RESIDENCE
TRASH ENCLOSURE
VISITORS CENTER
PARKING
CHAIN LINK FENCE (SYMBOL OBSCURED BY TREES)
WATER TOWER
VIRGINIA COUNTRY CLUB
ARROYO
DRAINAGE
ENTRY WALL
GATE
MAILBOX / DROPOFF
TRASH ENCLOSURE
GATEWAY ENTRANCE
VIRGINIA ROAD
VIRGINIA COUNTRY CLUB
COUNTRY CLUB MAINTENANCE YARD ENTRANCE
N
E
W
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0 15 30 60 90
LEGEND
Historic Building (Red Tile Roof)
Reconstructed Historic Bldgs. (Wood Shingle Roof)
Non-Historic Building or Structure
Arbors
A.C. Roadway
D.G. Walkway / Roadway
Paved Walkway
Temple Period Trees (1844-1866)
Early Bixby Period Trees (1866-1930)
Bixby / Cornell Period Trees (1930-1954)
Other Significant Trees (1954-1998)
Groundcover / Mulch Areas
Adobe / Brick Walls
Wrought Iron Fence & Gates
Chain-Link Fencing
Contour Line
Proposed Master Plan
Rancho Los Cerritos Master Plan

SECTION FOUR • MASTER PLAN RECOMMENDATIONS

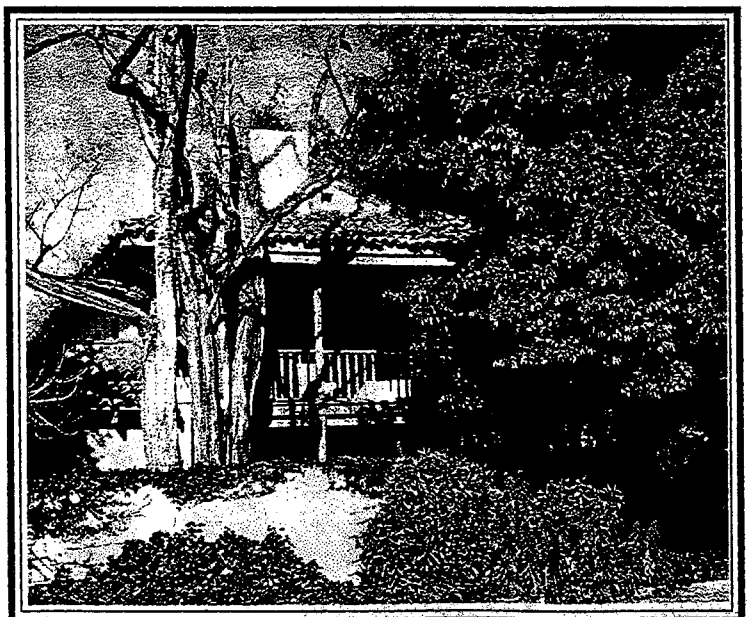
4.1 Restoration Approach: Preservation Standards and Guidelines

4.1.1 Purpose of Guidelines for Rehabilitating and Reconstructing Buildings at Rancho Los Cerritos

Guidelines have been prepared to assist Rancho Los Cerritos staff and their design consultants in rehabilitating structures within the Rancho Los Cerritos historic site. The guidelines are intended to be a design aid in determining acceptable alterations, additions and repairs for preserving the character of existing buildings and depicting, by means of new construction, the form, features and detailing of non-surviving site, landscape, buildings, structures or objects for the purpose of replicating their appearance at a specific period of time and in their historic locations. They are based on the *Secretary of the Interior's Standards for Rehabilitation & Illustrated Guidelines for Rehabilitating Historic Buildings*, published in 1992 by the National Park Service.

The *Secretary of the Interior's Standards for the Treatment of Historic Properties (The Standards)* provide general information to determine appropriate treatments for historic properties. They are intentionally broad in scope to apply to a wide range of circumstances. *The Standards* have been designed to enhance the understanding of basic preservation principles.

These guidelines were developed to expand upon *The Standards* and to promote the understanding of acceptable design approaches and appropriate treatment for reuse of the site. They are intended to heighten the awareness of both designers and occupants to historically significant features, and to emphasize the importance of making every attempt to preserve and maintain those features when making alterations to the site. The criteria presented in the guidelines will be used by Rancho Los Cerritos to evaluate the impact of the project's design on a structure's character, details and materials.



Looking north towards the Ranch House from the forecourt.

Section 4 - **Master Plan Recommendations**

Standards for Rehabilitation

A. *A property shall be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces and spatial relationships.*

B. *The historic character of a property shall be retained and preserved. The removal of distinctive materials or alteration of features, spaces and spatial relationships that characterize a property shall be avoided.*

C. *Each property shall be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, shall not be undertaken.*

D. *Changes to a property that have acquired historic significance in their own right shall be retained and preserved.*

E. *Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property shall be preserved.*

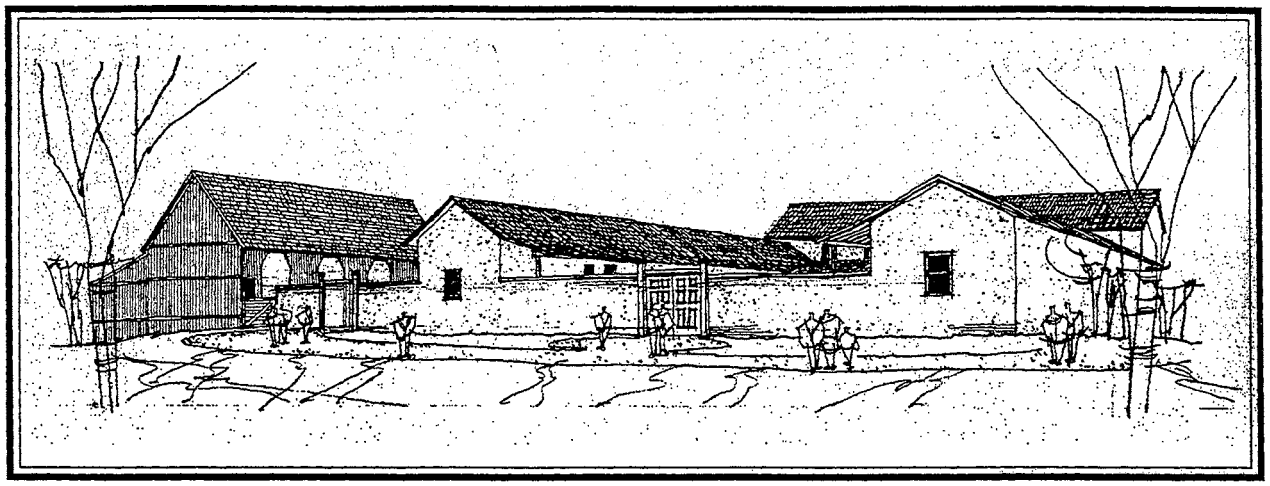
F. *Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new shall match the old in design, color, texture and where possible, materials. Replacement of missing features shall be substantiated by documentary and physical evidence.*

G. *Chemical or physical treatments, if appropriate, shall be undertaken using the gentlest means possible. Treatments that cause damage to historic materials shall not be used.*

H. *Archaeological resources shall be protected and preserved in place. If such resources must be disturbed, mitigation measures shall be undertaken.*

I. *New additions, exterior alterations, or related new construction shall not destroy historic materials, features and spatial relationships that characterize the property. The new work shall be differentiated from the old and shall be compatible with the historic materials, features, size, scale and proportions and massing to protect the integrity of the property and its environment.*

J. *New additions and adjacent or related new construction shall be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.*



Proposed barn reconstruction.

Standards for Reconstruction

A. Reconstruction shall be used to depict vanished or non-surviving portions of a property when documentary and physical evidence is available to permit accurate reconstruction with minimal conjecture, and such reconstruction is essential to the public understanding of the property.

B. Reconstruction of a landscape, building, structure, or object in its historic location shall be preceded by a thorough archaeological investigation to identify and evaluate those features and artifacts which are essential to an accurate reconstruction. If such resources must be disturbed, mitigation measures shall be undertaken.

C. Reconstruction shall include measures to preserve any remaining historic materials, features and spatial relationships.

D. Reconstruction shall be based on the accurate duplication of historic features and elements substantiated by documentation of physical evidence rather than on conjectural designs or the availability of different features from other historic properties. A reconstructed property shall recreate the appearance of non-surviving historic property in material, design, color and texture.

E. A reconstruction shall be clearly identified as a contemporary re-creation.

F. Designs that were never executed historically shall not be constructed.

Section 4 - Master Plan Recommendations

4.1.2 Landscape Preservation Standards & Guidelines



Location for California native garden. Photograph courtesy of Architect Milford Wayne Donaldson, FAIA.

The treatment and management of Rancho Los Cerritos cultural landscape shall be considered in cooperation with the management of the entire ranch property. Landscape interpretation is considered closely linked to the integrity and condition of the site and therefore, its ability to convey the historic character and character defining features of the past. If a landscape has a high integrity, the interpretive approach may be to direct visitors to surviving historic features without providing prominent interpretive devices such as freestanding signs or directories. The following is a brief summary of the restoration of the landscape character at Rancho Los Cerritos:

Restoration Approach

The recommended restoration approach is to restore and preserve the landscape character of the ranch as established by the well known landscape architect Ralph Cornell for Llewellyn Bixby Sr. in 1931; and the other relevant historic periods ranging from 1844-1954. All proposed landscape changes will be evaluated for conformance with *The Secretary of the Interior's Standard for the Treatment of Historic Properties* and *Preservation Brief 36: Protecting Cultural Landscapes: Planning, Treatment and Management of Historic Landscapes* and the *CEQA and Archaeological Resources Technical Advice Series* from the State Office of Historic Preservation.

A unique concern of landscape restoration is that the landscape spaces and their functions are fixed and remain the same, yet the living plants are always growing and changing by nature. Trees and shrubs grow and change in size and shape over time, modifying the look and scale of their respective space. The environment, microclimate, maintenance, pests and disease issues all change and alter the form. This is expected, and so the goal of restoration is to restore and maintain the essence of the historic period of the landscape. A guiding concept for landscape restoration is to provide an experience for visitors as though they are guests of that particular time period. This condition implies that there should be no evidence or obvious signs that the ranch is a public place, such as signage, trash receptacles, roped off areas, or other typical public devices. The restoration of Ralph Cornell's landscape design will demand understanding, resolution, constant attention and maintenance, with a daily work program implemented by knowledgeable ranch staff.

The authenticity of the site's restoration will be based on the goal and objectives that require approximate correctness and not a completely accurate restoration. The National Park Service's reasoning for this type of design approach is the following:

A. Certain species of plants may have changed or no longer exist due to lack of documentation/proof, unavailability, poor suitability or insect/disease problems.
B. Many original trees have changed in size, or died due to age, so shade and sun patterns and exposure may effect the use of original neighboring plantings.
C. No exact record exists of all the original plantings, therefore making it impossible to provide the exact period of all planting areas. However, restoration efforts should be guided by photograph collections, past studies, Cornell's drawings, staff reports and input from family and acquaintances.
D. There is no complete inventory of all the site furnishings (i.e. benches) of each of the time periods. Many pieces have been removed or lost. However, photograph collections or recollection by family members could guide efforts.
E. Public use, traffic patterns and site security, as well as visitor health, safety and welfare issues, require modifications.
F. Encroachment of the neighboring residential and country club development affects the view from inside the Rancho. Screening will be necessary as a visual barrier and to enhance security.

4.2 Recommendations and Guidelines

The site responds to the requirements of the interpretive plan which envisions a limited parking lot including a space for school and tour bus drop-offs. It also provides an opportunity for the introduction of reconstructed buildings to the site to provide for operational and staff needs.

The plan calls for better site identity, improved access and service patterns, and amenities for the interpretive program.

The site plan objectives are to:

A. Restore the character of the site as developed through its periods of significance.
B. Provide accommodations for increased visitor capacity and required access, security and support services, while minimizing changes to the character, resources and visual quality of the site.
C. Provide interpretive program facilities and site improvements that are complementary and responsive to the character of the site.
D. Encourage recreational activities such as exercising, walking and nature watching by providing elements such as open lawn, picnic amenities, garden trails and natural open spaces. Picnicking for school groups could occur within a reconstructed barnyard area.

Section 4 - Master Plan Recommendations

4.2.1 Goals and Objectives

The Goals of the guidelines for Rancho Los Cerritos include (1) conserving those areas and characteristics of the ranch site that remain intact from the historic time periods, and (2) restoring and maintaining the remainder of the site to reflect the general image and character of those periods of time. Therefore, the following objectives were met as part of the master plan process:

A. Identification of architectural and landscape features and artifacts that remain unaltered from the identified time periods.
B. Identification of architectural and landscape features and artifacts that are historically inappropriate and have been added after the purchase of the site by the City of Long Beach in 1954.
C. Development of a prioritized restoration and improvement program based on the following categories:
    1. Urgent
        a. Repairs and/or replacement immediately needed due to possible risk to life, property or for essential security.
    2. High Priority
        a. Repairs and/or replacement needed soon due to possible risk to life, property or for essential security.
        b. Replanting, repair and reconstruction to correct badly deteriorated features, improve appearance and facilitate overall maintenance.
    3. Medium Priority
        a. Items which may take more time and/or funding to complete and which have less immediate impact on the appearance or function of the site.
    4. Low Priority
        a. Non-essential items which can be deferred for 10-15 years, or those that are more costly compared to the benefit that they provide.

A listing of potential projects or construction items is given in the detailed cost estimate and phasing plan provided in the appendices.

Some other guidelines that were considered are:

A. Establish Maintenance Standards that are sensitive and devoted to the original character and needs of the buildings and site.
B. Minimize the visual and physical impact of the necessary site support services (new Visitor's Center, parking lot, disabled access ramps, irrigation and lighting).
C. Preserve and maintain the remaining views and rural character within.

D. Site observations and monitoring of the landscape features may be made by the site's representative, on-site horticulturist or a licensed landscape architect, at specified periods, to survey and evaluate the condition of the installed and maintained landscape.

1. The specified intervals should be every three months.
2. During these observation visits, regular site observation will include:
   a. General maintenance practices
   b. Plant count, to assess replacement needs
   c. Tree stake/ties observation
   d. Irrigation effectiveness and watering practices
   e. Pest control
   f. Root control
   g. Weed abatement practices
   h. Pruning practices
   i. Fertilizing program

E. A written report should be prepared every six months and should include:

1. Recommendations for mitigation of problems observed.
2. Plants observed to be in a state of poor health and to be noted on a site map.
3. Watering schedules and moisture levels in problem areas noted on a site map.
4. Recommendations for problem areas along with approximate costs for improvements.



Inner courtyard looking northwest. Photograph courtesy of Architect Milford Wayne Donaldson, FAIA.

Section 4 - Master Plan Recommendations

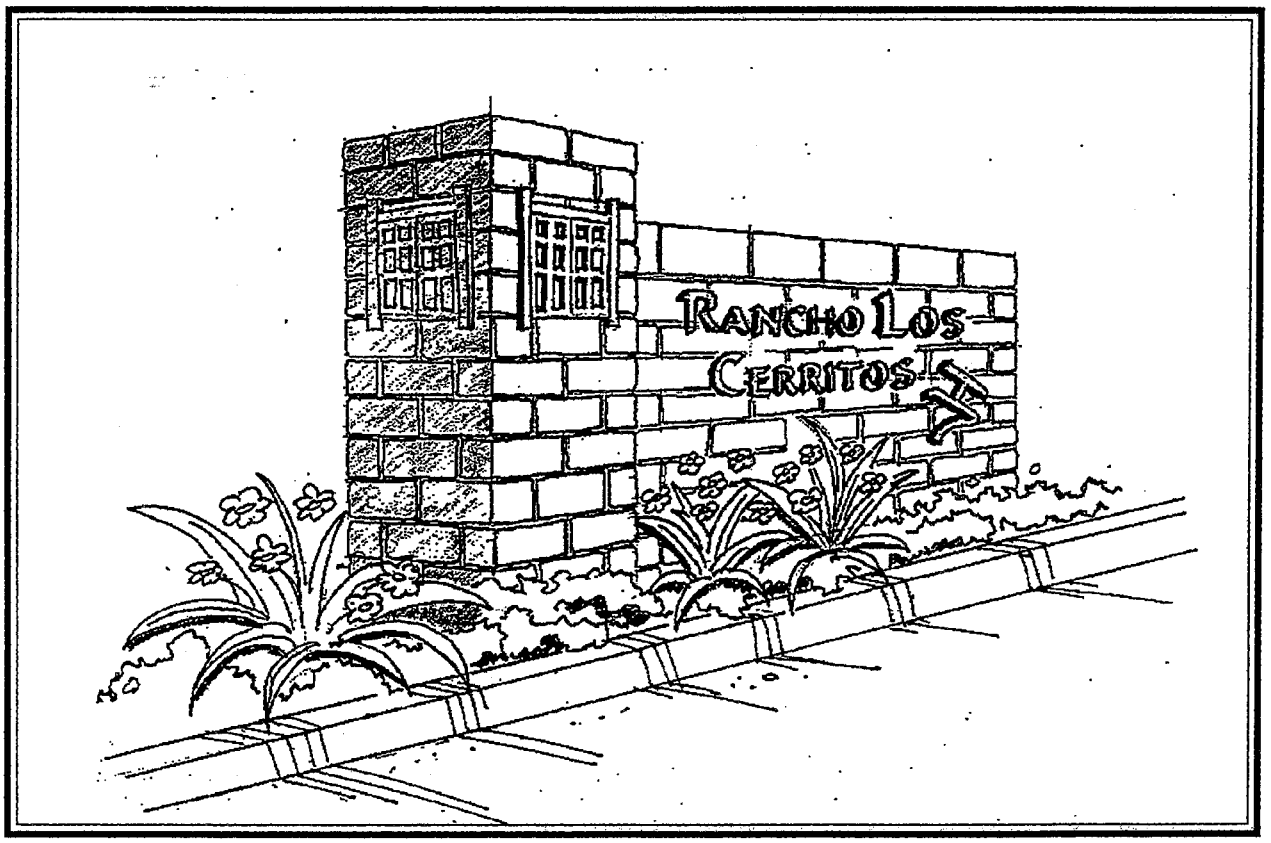
4.2.2 Significant Ranch Areas

There are new areas being proposed that will require some removal of the current existing elements when the master plan is fully implemented (i.e. the orchard will replace the 1980s Mexican/Spanish tiled courtyard).

The new elements being proposed are as follows:

A. Rancho Entrance and Driveway

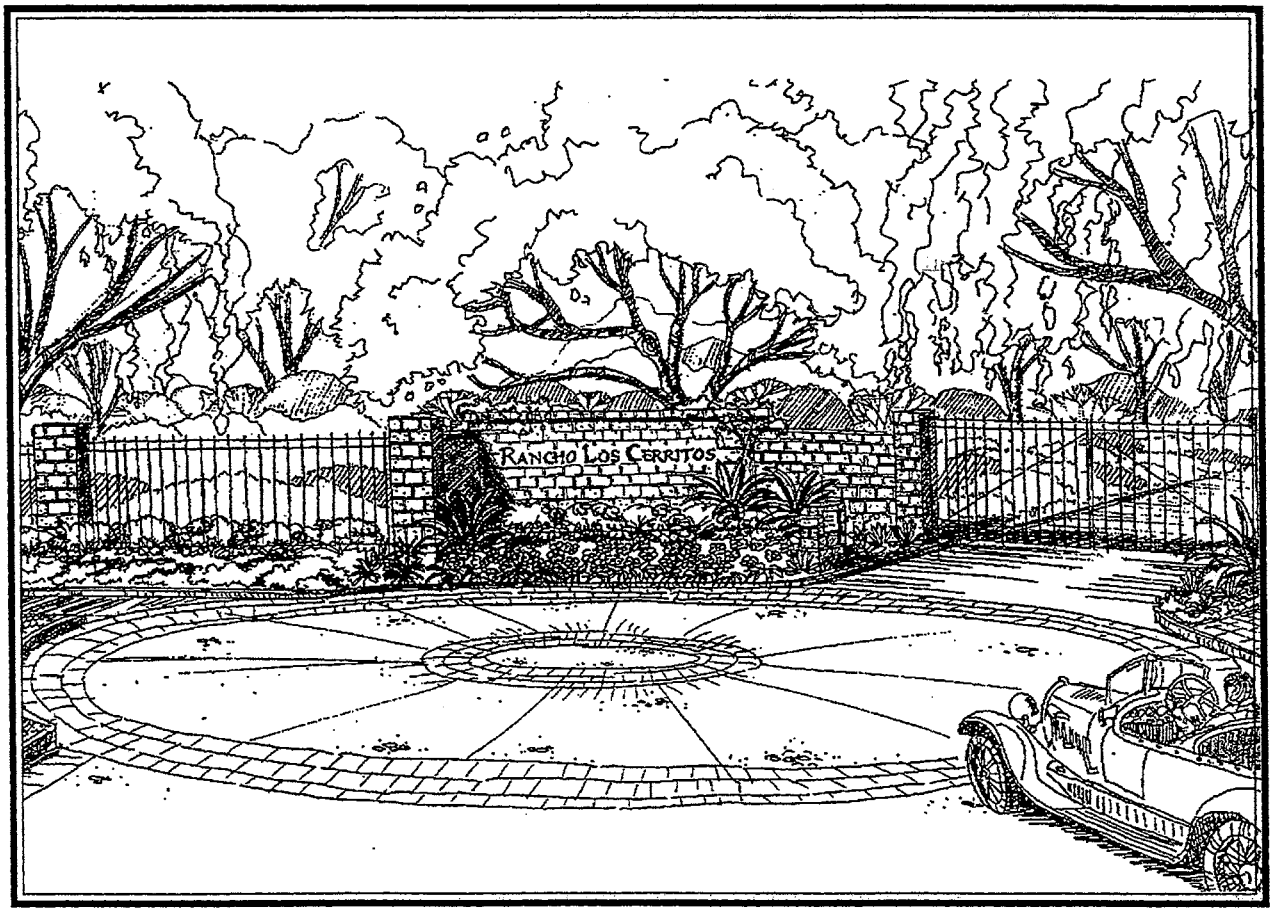
The goal of the renovated entrance at Virginia Road is to provide a genuine and clear route for visitors to access the Rancho. Two large pilasters along Virginia Road will provide a "gateway entrance" and should be located just past the Virginia Country Club driveway entrance.



Entry pilaster located on Virginia Road just beyond the Virginia County Club entrance driveway.

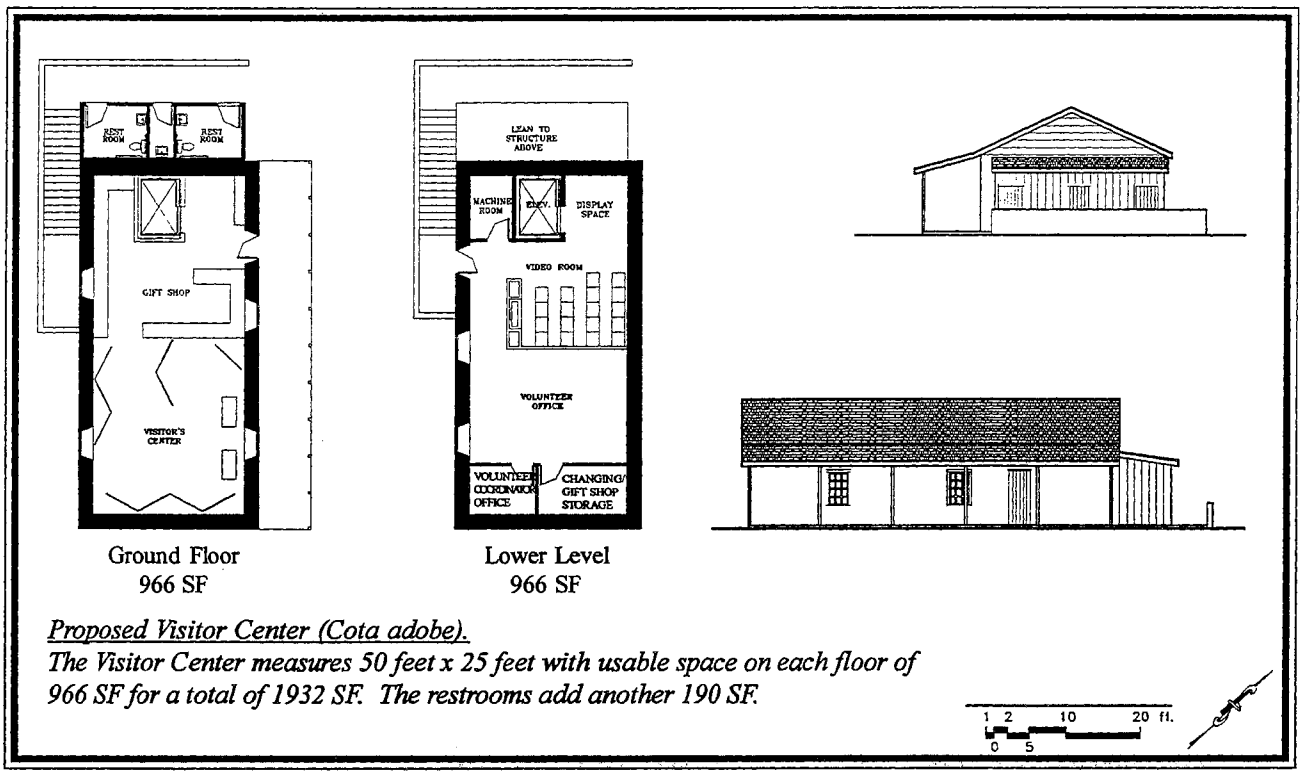
A textured and paved circle on Virginia Road just in front of the main gate will identify the Rancho Los Cerritos entry. This enriched paving at the front gate entrance will be concrete material with a flagstone or brick pattern similar to materials found on the ranch site. The driveway must be able to support fire trucks and emergency vehicles. The main private asphalt drive to the orchard area and into the forecourt will remain to reflect the theme of Ralph Cornell's original design. A three-foot wide natural swale with area drains to Virginia Road will be incorporated along the downhill edge of the road. The addition of a walkway should not create a drainage problem.

The main gate will be flanked by walls built with extra large bricks similar to the 1930s garden wall. An entrance sign and rustic hand-forged black iron gate, supported by large pilasters, and historic landscaping will welcome vehicles as they enter the site. A six-foot hand-forged wrought iron see-through fence with pilasters will be provided along Virginia Road fronting the arroyo. A community trash enclosure is also planned near the fence to encourage a more genteel containment for the neighborhood refuse. The walls shall be covered with a layer of paint and finished to match Cornell's walls although the Bixbys stopped painting the walls at some point. Upon entering the gateway portal, vehicles will be driven up the landscaped drive to the parking lot area. A separate pedestrian walk and gate access will be built adjacent to the main gate. A built-in intercom system will be provided for vehicles and pedestrians on the west side to gain access into the Rancho. The option of a five-foot wide stabilized decomposed granite pathway (emulsified DG) could be incorporated along the arroyo side of the driveway for pedestrian access to the Visitor Center. There will be two to three areas along the driveway to offer opportunities for interpretation, resting and viewing without encroachment into the arroyo habitat area. Wood seating and benches could be provided as amenities that would complement the landscaping with an informal character.



Rancho entrance.

Section 4 - **Master Plan Recommendations**



Proposed Visitor Center (Cota adobe).
The Visitor Center measures 50 feet x 25 feet with usable space on each floor of 966 SF for a total of 1932 SF. The restrooms add another 190 SF.

Upon entering the site, passengers can either be dropped off at the Visitor Center or the visitor may park in the forecourt. If the parking lot is full, signage will direct the vehicle to park along Virginia Road. Pedestrians can walk up the pathway adjacent to the asphalt road to the Visitor Center. This roadway will also provide for school or tour buses to enter the ranch and drop off passengers. Buses will be directed to park along Virginia Road and/or at a nearby site (for special events). Separate reserved areas will be available for parking for persons with disabilities.

B. New Visitor Center/Decomposed Granite Driveway

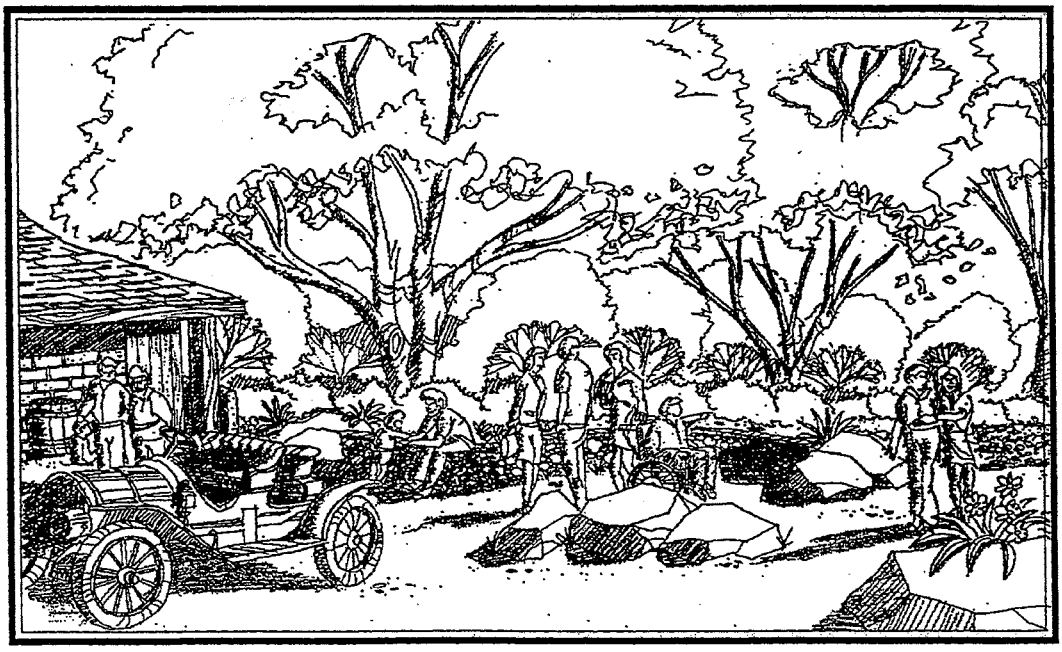
It is desirable to have a highly visible and easily accessible starting point for the Visitor Center. The reconstruction of the Cota adobe using stabilized adobe bricks would be a subtle and yet ideal structure for providing a convenient place where arriving groups and visitors can receive directions and information, purchase gifts, meet docents and obtain orientation materials. Visitors will be given the opportunity to take one of several docent-led tours. Signage and removable bollards on the road will prevent visitors from entering barnyard areas. Staff will be able to remove the bollards to gain access for parking or special occasions.

The Visitor Center will include a reception area, interpreter's lounge and changing area, volunteer coordinator office, storage space, a small area for interpretive displays, an audio/visual area as well as a gift shop with souvenirs and books that are related to the site. The Visitor Center will include a number of wall exhibits and historic photographs to depict the history and layout of the site and outlying buildings. These visual displays will introduce the visitor to the geographical features of the site and educate the visitor to changes to the Rancho during its historic time periods. An audio/visual room will be accessible for persons to view videos or slide shows of the site's history, including "home movies" from the families who lived on the Ranch.

The asphalt paving from the entry drive will transition into stabilized decomposed granite paving that will wrap around the front of the new Visitor Center. Four specially designated parking spaces will be created to improve access for persons with disabilities. Modifications to these parking configurations will be emulsified decomposed granite and will allow easy wheelchair use. The accessibility pathways will not alter significant landscape features.

The outcroppings of boulders will act as bollards to assist in directing traffic away from the outdoor reception/seating area. A low seat wall with stone veneer will provide seating for pedestrians and provide a progression into the adjacent California native garden area.

The landscape theme of the Visitor Center will incorporate the boulders and utilize a more naturalistic plant palette. The plant materials shall incorporate plantings as available and listed on the enclosed plant tables for the future Visitor's Center. These include Aleppo Pine, Olive, Toyon, Canary Island Pine, Lehmani Eucalyptus, bush Anemone, Red-Hot Poker, Statice, Agave, Ice plant and an assortment of flowering perennials for color and accent.



Visitor's reception area.

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C. Inner Courtyard

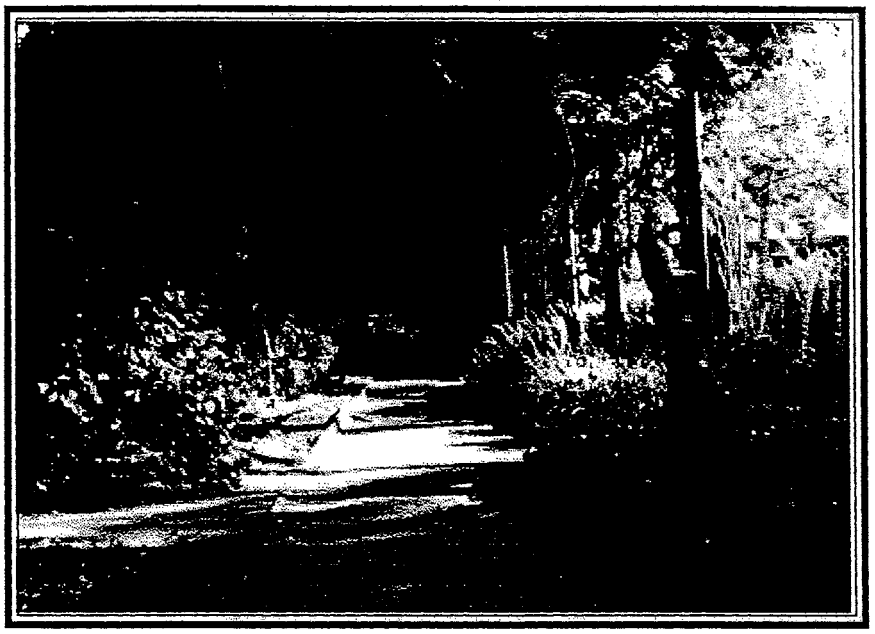
Originally the inner courtyard was a work area; in the 1930s, it was landscaped and used by the Bixby family for entertainment and enjoyment. The goal is to restore the courtyard to its 1930s condition. There are several modifications required that should comply with *The Secretary's of Interior's Standards for Treatment of Historic Properties*. These include repairing brick paved areas, renovating the existing lawn, installing an automatic irrigation system, replacing of original landscaping of citrus, boxwood hedging, mock oranges and restoring other Cornell specified plantings. The majority of the walks would be fully accessible to the disabled and elderly and will require some slight modifications to transcend the existing grades such as the central crossover walkway which has a slope from the north verandah to the south verandah. Thresholds at the doorways would be modified to decrease their height.



Looking west from the sunporch towards the inner courtyard. Photograph courtesy of Architect Milford Wayne Donaldson, FAIA.

D. 1930s Garden/Forecourt

The back garden area is in good condition. The large lawn area designed by Cornell is encircled by flowering trees and shrubs. The area needs renovation and installation of an automatic irrigation system. Declining historic trees from Temple, Bixby and Cornell's eras will be replaced as the horticultural needs of the trees can be met.



Brick and decomposed granite walkways. Photograph courtesy of Architect Milford Wayne Donaldson, FAIA.

The brick and decomposed granite walkways surrounding the garden require some replacement due to wear. A gazebo, replicated in 1976 to represent the "summerhouse" referred to by Sarah Bixby Smith in *Adobe Days*, will be removed.

There are wood-edged flowerbed areas that are now covered with shade due to the taller and mature trees, including the famed Moreton Bay Fig tree. These areas will be dedicated to mostly shade tolerant garden type plant materials such as azaleas, camellias, ferns and irises. The non-historic herb garden adjacent to the ancient water tower will be removed. Herbs will be planted in the California Native Garden area. The historic roses in the southeast corner should remain, provided the sun exposure is satisfactory and there is adequate space. To the west of the ancient water tower is the current interpretive activity area. This activity area will be relocated to the barnyard. Cornell's planned avocado orchard will be replanted within this area. There are many areas throughout the garden edges where small pockets of annuals, bulbs, and perennial flowers and color can be planted. These color areas can be identified by ranch staff and/or by reviewing past landscape designs that typify Cornell's style of plant design accent.

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Replicated arbor with wisteria vines. Photograph courtesy of Architect Milford Wayne Donaldson, FAIA.

The back garden retreat is surrounded by a five-foot high brick wall that separates the maintenance yard and forecourt (parking area) and establishes the property line between the Rancho and the Virginia Country Club. A landscape buffer will be improved around the perimeter of this back garden area as well as throughout the ranch perimeter. It will be made up of informal hedging and small trees that Cornell specified, and will be eight to ten feet tall to visually screen out the adjacent residences and country club facilities. These plantings shall include Victorian box, Catalina Cherry, Sweet Olive and Avocado trees.

The City of Long Beach should also consider negotiations with the Virginia County Club to encourage additional screen plantings on their side of the wall utilizing identical plantings.

Drainage has been a constant problem during periods of inclement weather. The lawn areas closest to the adobe will require small area drains and catch basins to remove standing water. The reoccurring puddles and ponds create hazards for pedestrians during visits and special events.



Visitor parking forecourt. Photograph courtesy of Architect Milford Wayne Donaldson, FAIA.

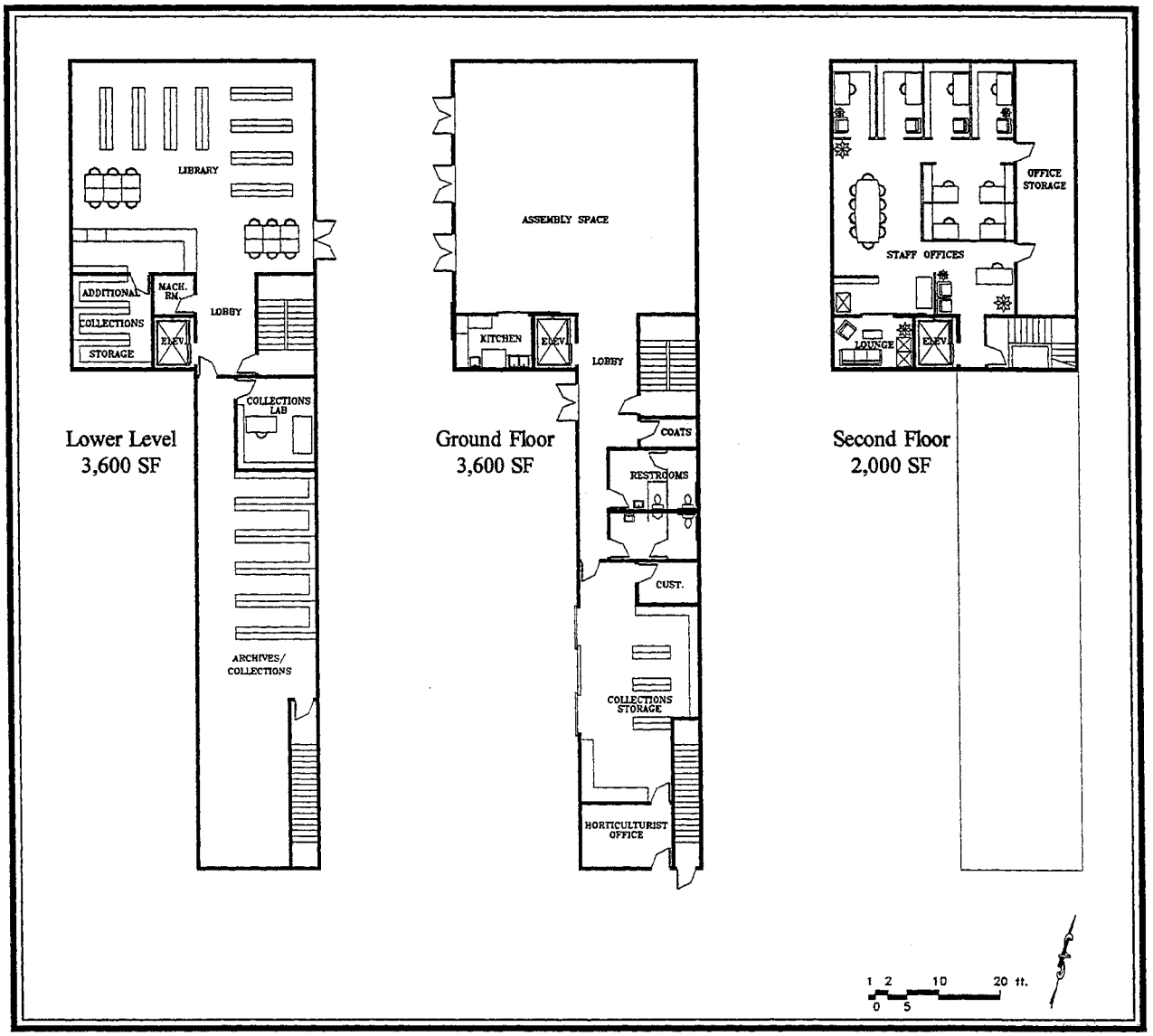
The current size of the forecourt is 11 standard car spaces. As the number of visitors increases and during special events, additional parking along Virginia Road, at nearby schools, or at other facilities such as bank parking lots on Long Beach Boulevard, could be provided. Any effort to increase the on-site parking would be destructive to the historic and visual character of the ranch.

E. Staff Offices/Multipurpose Room/Library

In order to be able to use the Ranch House for interpretive displays, the introduction of another facility became necessary in order to meet the growing needs of the site. The reconstruction of the Barn became the ideal solution to accommodate staff offices as well as a much needed multipurpose room and library/archival area. The Barn will be reconstructed in its original location north of the Ranch House. There will be no windows facing north or west from the second story in order to provide privacy to the neighbors below.

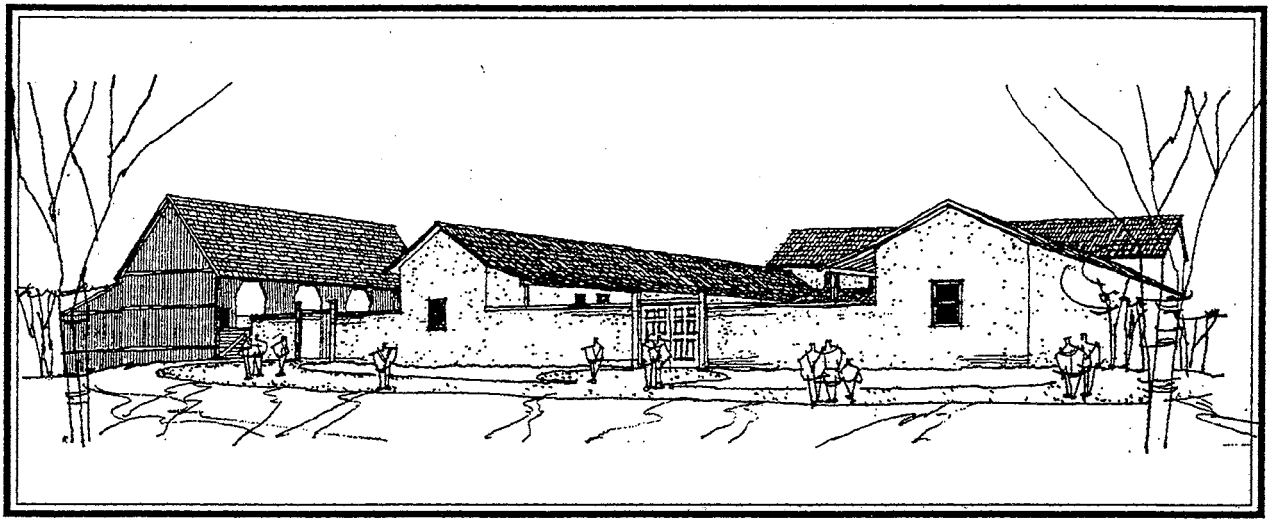
The multipurpose area can provide for meetings, lectures and special events. It will have a capacity for seating about 80 people and include state-of-the-art communications facilities, a small serving kitchen and restrooms.

The library/archival area will house all research materials and will have a collections storage area that is environmentally controlled and has enough room to expand.

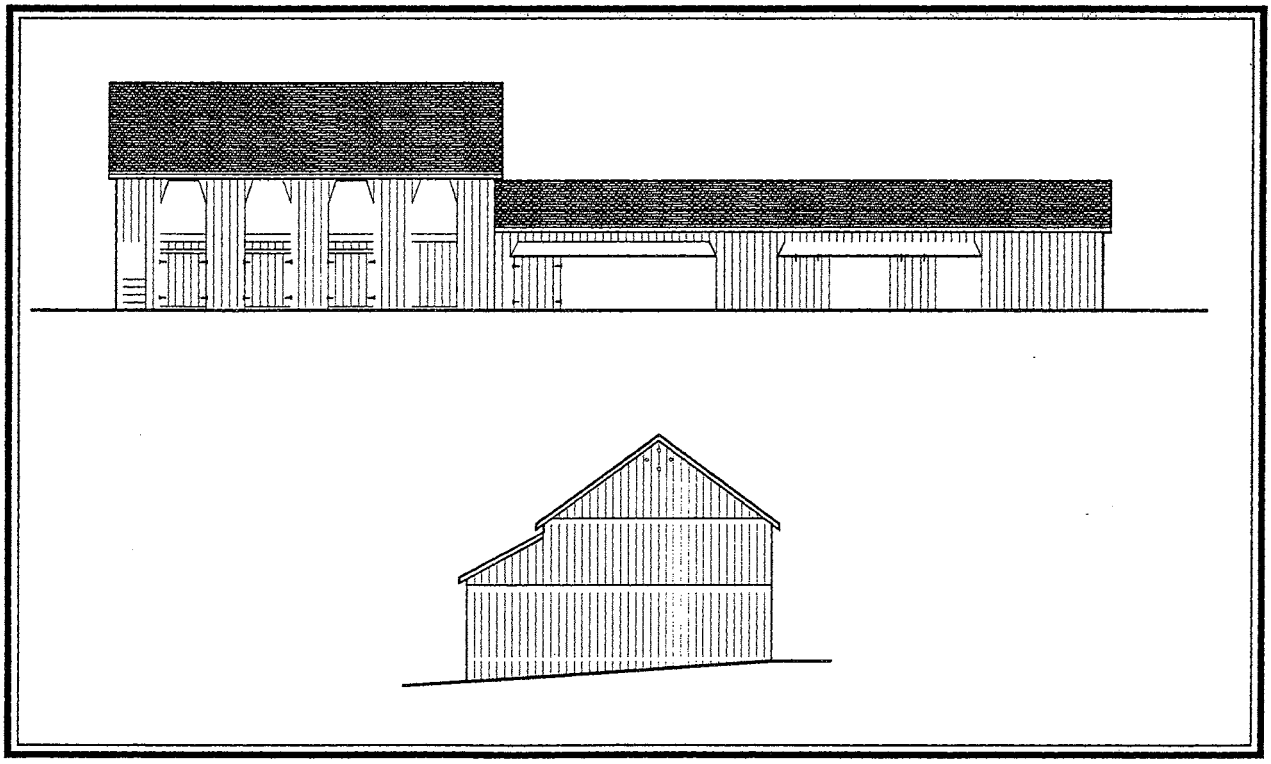


Barn floor plan. The main barn is 50 feet x 40 feet with the utility building 80 feet x 20 feet with a total usable space of 9,200 SF.

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Ranch House and Barn.

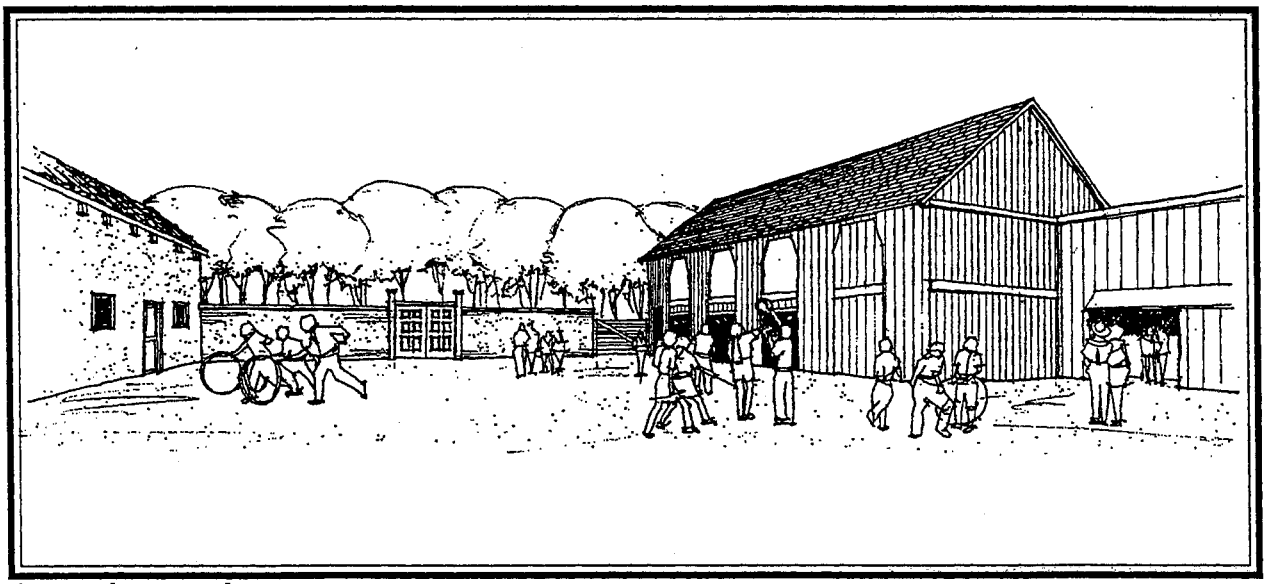


Proposed Barn elevation.

F. Barnyard/Staff Parking & Maintenance Yard

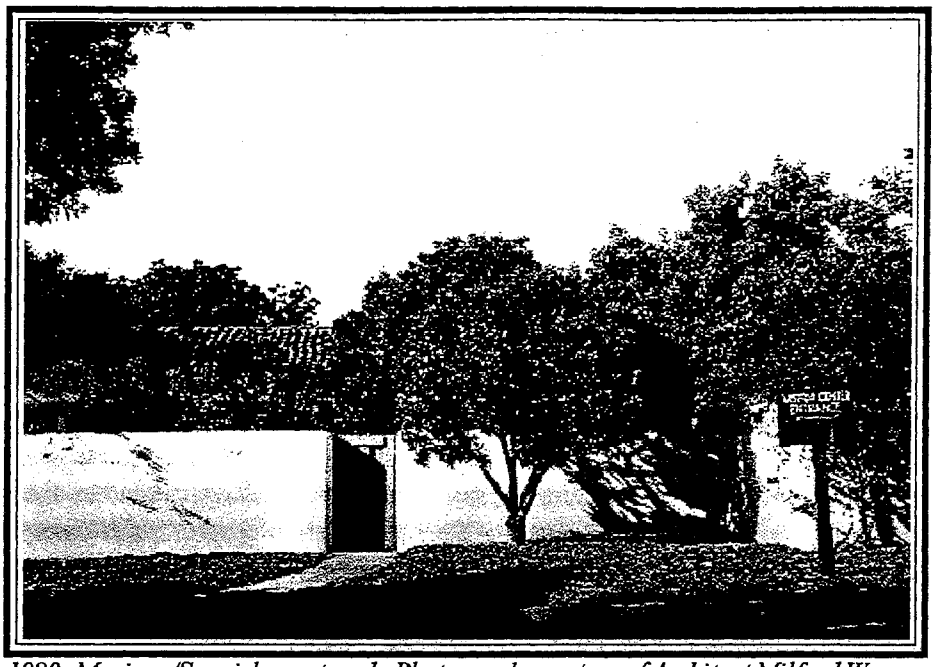
The barnyard will be interpreted as the 1870s Bixby period features. This area will replicate the Bixby's period of significance and there will be no landscape or plant materials. It was the work yard where horses were saddled and carriages, buggies and supplies were stored, loaded and prepared. In order to construct the barn and sheds, the picnic grounds added by the ranch staff will be removed. The second orchard area will replace the current activity area and consist of replanting a number of specimen avocados specified by Ralph Cornell. Informal picnic areas for children can take place in the barnyard. Picnic areas for the general public will be provided close to the arroyo and adjacent to the Visitor Center.

The barnyard will be the central gathering space for interpretive opportunities and activities to help establish the site as an active learning center. There will be tour programs and historic demonstrations for children to experience life on a real working rancho... a living stage! A number of original features and structures will be maintained here, such as the horno, a second trypot, incinerator and corral area. The 1930s garage will be modified for a children's classroom and will have the ability to open into the barnyard. An area of the barnyard will contain dirt to host special events such as the celebrated "Mud Mania." The remainder of the barnyard will be surfaced with stabilized decomposed granite.



Barnyard courtyard.

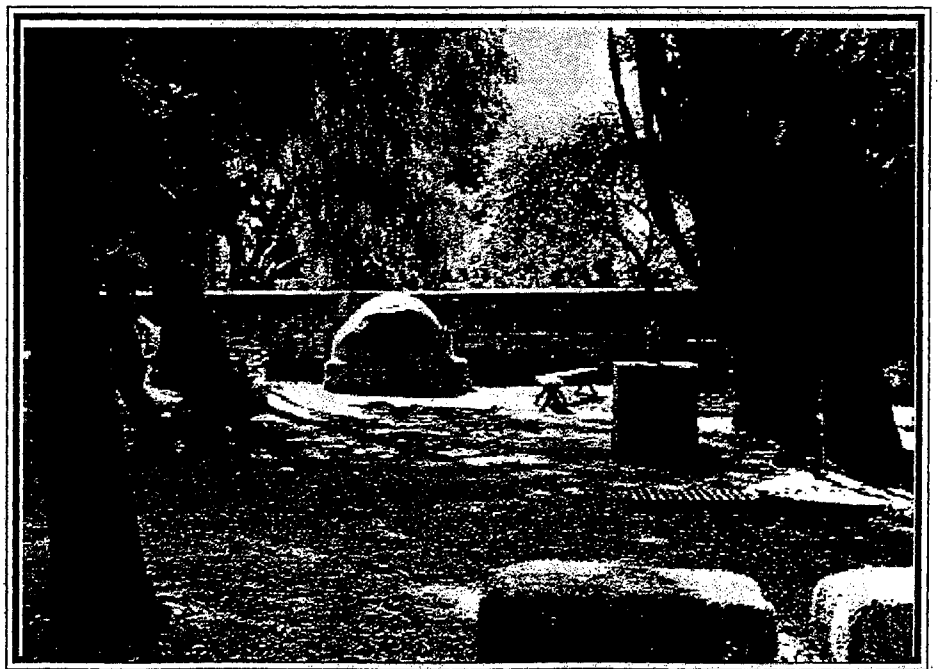
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1980s Mexican/Spanish courtyard. Photograph courtesy of Architect Milford Wayne Donaldson, FAIA.

G. Restored Orchard/Ranch House Landscape

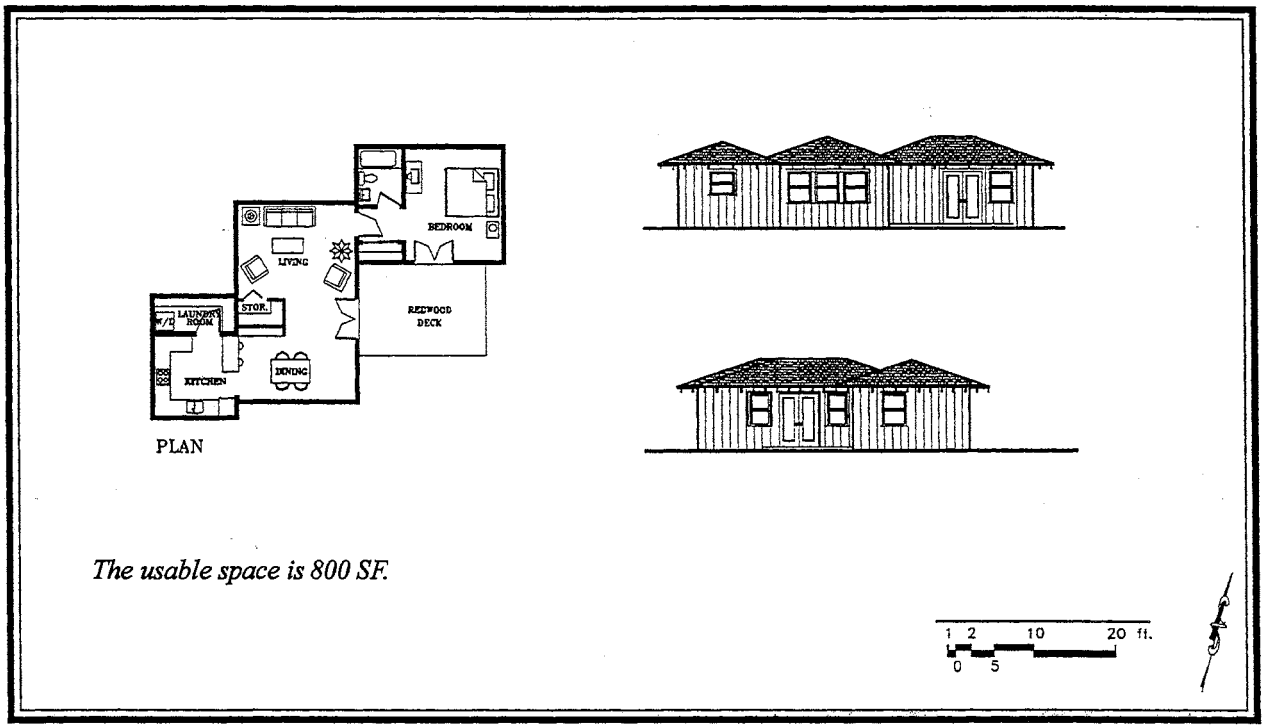
There are two orchard areas to be restored. One will replace the Mexican/Spanish tiled courtyard adjacent to the Ranch House. The citrus trees that exist there now may be utilized as part of the grove once they are determined to be from the 1930s. A pedestrian walkway will meander its way through the grove from the Visitor Center to the gate near the library entrance. A hedge of strawberry and lemon guavas will enclose the orchard and provide a soft landscaped edge along the driveway. The main orchard area could be irrigated by small irrigation ditches to simulate an old farming irrigation system for demonstration purposes.



Children's activity area used during school programs. Photograph courtesy of Architect

Perimeter landscaping along the west wall of the Ranch House was removed due to the deterioration of the structure from irrigation moisture and invasive root systems. Planting in this area needs to be carefully considered; however, some of Cornell's plantings should be replanted. Precautions need to be taken such as drip irrigation and/or low precipitation irrigation spray heads that spray away from the walls. All finish grades should divert water away from the structures and/or be captured in an unobstrusive subsurface drainage system.

The use of small area drains and catch basins could also relieve puddling and excess moisture around the structures. French drains alongside of the adobe structure should be discouraged as they normally do more harm than good due to the "wicking-up" by the adobe bricks.



Elevation and floor plans of the proposed Caretaker's Residence.

H. New Caretakers Residence

The caretaker's new residence is located off the drive to establish a permanent presence and provide better security. There will be a large massing of shrubs that will buffer all sides and ultimately camouflage the residence from visitors. There will be a small patio on the backside with a secluded access entry/walk adjacent to the parking forecourt.

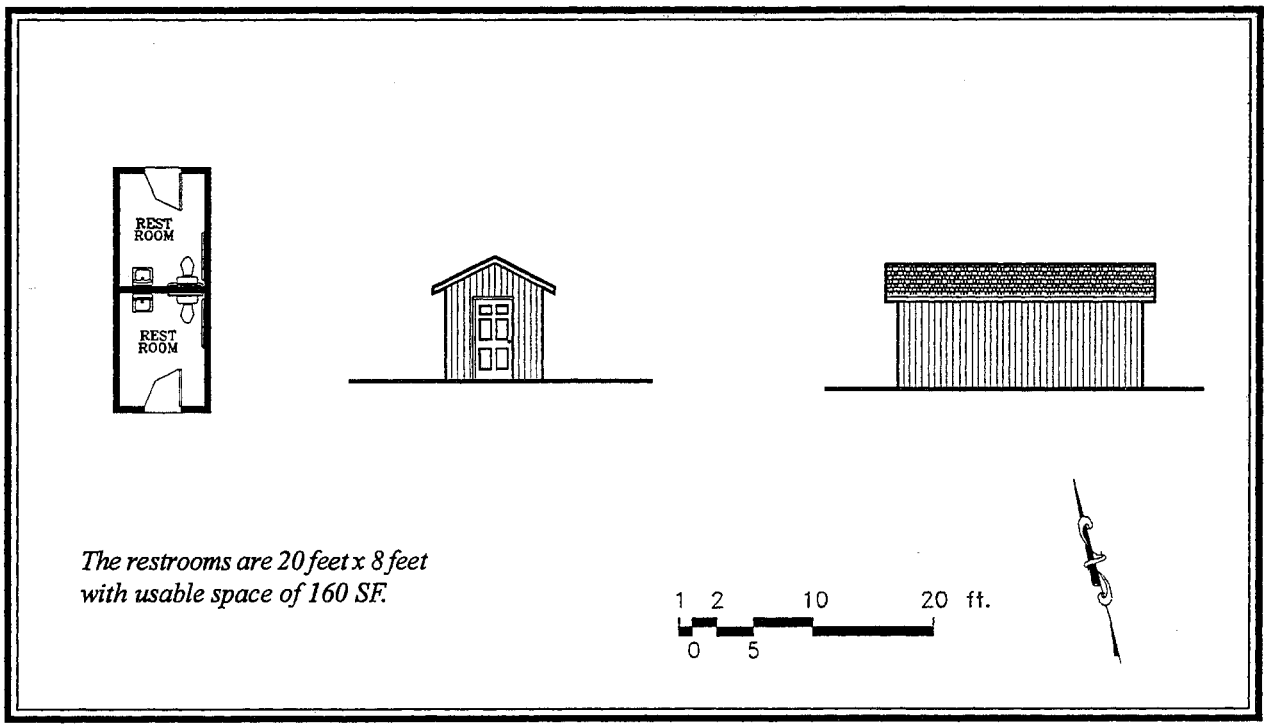
Integrated security and protective measures should be located in a protected on-site facility that can be readily monitored by the resident staff. Present state of the art technology can provide appropriate protection with minimum staffing requirements or risk, such as a video camera, emergency remote call devices and silent alarms to police.

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The plant materials shall incorporate Ralph Cornell's plantings as available and listed on the enclosed plant tables. These include Red Flowering Gum and Red Ironbark Eucalyptus, Toyon, Canary Island Pine, California Lilac, Paraguay Nightshade, Butterfly Bush and Broom.

I. Public Restrooms

The site will have appropriate restroom facilities located throughout the property. These facilities will be accessible for persons with disabilities, visually unobtrusive and compatibly designed to match the architectural style of the site. All restrooms will have modern plumbing. There are three restroom locations provided for use by the general public. The first one is in the Visitor's Center, the second is at the barnyard and the third is inside the barn structure. The 1980s restroom located at the parking lot area will be removed once the Visitor's Center restrooms are constructed.



Elevation and floor plans of the proposed barnyard public restrooms.

J. Arroyo/Open Space

The arroyo should be preserved in the most natural state possible, with existing trees and vegetation cleaned-up, protected and maintained. The arroyo area may be selectively replanted with alders, sycamores, cottonwoods, willows, oaks, or similar native trees to enhance the overall visual quality. Additional biological design criteria, along with the landscape guidelines, will provide the framework for the preservation of the arroyo. The area should be adequately irrigated, if required, to maintain its riparian-like habitat and minimize the danger of fire.



The arroyo. Photograph courtesy of Architect Milford Wayne Donaldson, FAIA.

In locations disturbed by construction, a planting program should include native or naturalized groundcover for erosion control, with some informal tree placements. The objective is to create an informal look, extending the arroyo environment into the project site. These transition areas should be natural and supplied with supplementary irrigation watering.

Maintain open space areas by replanting with native grasses and wildflowers; this will foster a natural look while addressing maintenance, weed overgrowth and fire control.

Seating areas and viewpoints located near the Visitor Center and drive will be provided to offer opportunities for interpretation, resting and viewing without encroachment into the arroyo habitat area. Wood seating and benches could be provided as amenities that would complement the landscaping with an informal character.

Perimeter buffers will allow views into the arroyo from Virginia Road by providing openings in the wall with steel fencing. Additional buffering would be required to screen the proposed Visitor's Center from the adjacent residential view. Also low growing dense vegetation should be planted along the top of the arroyo to discourage pedestrian access into it.

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K. California Native Garden

It is recommended that a specific area to the west of the Ranch House and north of the Visitor Center be set aside as an interpretive area for California native plants. This will enable management to replant the wide selection of natives used by Cornell and lost due to changing environmental conditions or age. The garden areas would be accessed by meandering, stabilized decomposed granite pathways built on the existing contours of the land. Additional features and amenities would be included to enhance the garden atmosphere such as boulders, a dry creek wash, wheel chair access, overlooks, educational booklets and seating.



Native garden sketch.

1. Native plants were the remedies, food source and ceremonial symbols used by early Native Americans. Landscape features were used to name many places of the area like Los Cerritos (Little Hills), Los Alamitos (Little Populars), Los Robles (the Oaks), Los Alisos (the Alders), Palo Verde (Green Wood), and Arroyo Seco (Dry Stream). The garden would be divided into two major plant communities: riparian and southern oak woodland.
2. An herb garden would be located in the native garden and provide a botanical exhibit for education and storytelling. Herbs would be identified for their unique ornamental or medicinal qualities as part of the interpretive stories told by the docents.

L. Perimeter Landscape

A landscape buffer will be provided around the perimeter of the Rancho. The existing six foot chain link fence will be removed and replaced with an eight foot black vinyl chain link fence with no barbed wire. This fence will be planted at intervals with flowering vines such as Honeysuckle, Lady Banks Rose and Morning Glory. Also additional small trees and medium sized shrubs that Cornell utilized at the Ranch will provide an eight to ten foot tall screen to visually block out the adjacent residences and country club facilities. These plantings shall include Victorian Box, Catalina Cherry, and Sweet Olive trees. The locust trees will remain until maturity and will be reintroduced into the landscaping. The intense and heavy planting of landscape will provide deterrence to trespassers, as well as enhance the natural beauty of the site.



Current landscape perimeter fencing does not screen adjacent residential development. Photograph courtesy of Architect Milford Wayne Donaldson, FAIA.

4.2.3 Site Access

A. Visitor Sequence, Capacity and Circulation

The visitor is allowed to enter the site through the main gate and proceed up the road to the parking area to the right or they can proceed to the drop-off zone in front of the Visitor Center. This area allows for safe and easy loading and unloading of cars and buses for day use as well as for special programs.

There are several recommended routing plans for visitors depending on which interpretive tour visitors are interested in taking. The starting location for each tour route should be at the Visitor Center. Visitors may then be directed to the house, garden or the barnyard.



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Tours for persons with disabilities would use the same route for the gardens and barnyard; access to the house tour would be through the 1930s entry into the main hallway.

The tour groups should be kept small, around ten to 12 persons. The maximum size of the tours should not exceed 15 at any one time. Regular tour groups should be 30 minutes apart to avoid overlap. School class programs and group tours may require special accommodations. The ultimate visitor capacity and flow should be carefully monitored and re-evaluated annually. The recommended total not-to-exceed visitor capacity for the year should be 35,000 persons.

2. Emergency and Service Access, Pedestrian Gate for Staff

All emergency, service and maintenance vehicles will have direct access to the site through the main entry on Virginia Road. Maintenance vehicles within the site are to be used for garden and grounds maintenance. The main entry gates will be coded for entry during off-hours. A coded pedestrian gate will be adjacent to the main entry gates to allow staff to enter the site without using an automobile. The gates will have a standard push-button code pad along with an intercom system. The trash enclosure will be moved to the southeast end of the forecourt. This bin will be visually unobtrusive and compatibly designed to match the ranch theme.

4.2.4 Accessibility Standards

A three step approach has been conducted to identify and implement accessibility modifications that will protect the integrity and historic character of Rancho Los Cerritos:

A. Review the Historical Significance of the Property

A review of the National Register nomination and the California Historic Registered Landmark nomination packets with the physical investigation of the site has been completed in order to identify which character-defining features and spaces must be protected prior to full implementation of the master plan.

For the historic Rancho Los Cerritos, the construction materials, the early Spanish design and modifications made to the property over time, the principal elevations, the major architectural or landscape features, and the principal public spaces constitute some of the elements that will be preserved. Every effort will be made to minimize damage to the materials and features that convey the site's historical significance when making modifications for accessibility.

B. Assess the Property's Existing and Required Level of Accessibility

A detailed building survey and accessibility assessment was prepared by the City of Long Beach in 1991. The survey was prepared without solutions that are sensitive to the preservation of the site. The survey, however, offers an excellent base of information for the design phase. During the design phase, the survey should be reviewed with representatives of the local accessibility communities and Cultural Heritage Commission to both educate and work out acceptable solutions for accessibility throughout the site. The survey will identify accessibility barriers in the following areas: building and site entrances, including surface textures, widths and slopes of walkways; parking; grade changes; size, width and configuration of doorways; interior corridors and path of travel restrictions; and public toilets and amenities. A preliminary tour was made with City personnel to identify various design options.

Title 24, California Building Code (CBC) will be reviewed carefully before undertaking any accessibility modification. The Americans with Disability Act Accessibility Guidelines (ADAAG) will be referenced when complying with the Americans with Disabilities Act (ADA) requirements. In addition, the National Park Service's *Preservation Brief 32: Making Historic Properties Accessible* can provide alternative solutions.

C. Identify and Evaluate Accessibility Options within a Preservation Context

Solutions that provide the greatest amount of accessibility without threatening or destroying the historic integrity of materials and features are preferred.

Modifications to improve accessibility will be based on the following:

1. Making the main or a prominent public entrance and primary public spaces accessible, including a path to the entrance;
2. Providing access to goods, services, and programs;
3. Providing accessible restroom facilities; and
4. Creating access to amenities and secondary spaces.



Handicap ramp at the south wing of the Ranch House. Photograph courtesy of Architect Milford Wayne Donaldson, FAIA.

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All proposed changes will be evaluated for conformance with *The Secretary of the Interior's Standards for the Treatment of Historic Properties*, National Park Service, which were created for property owners to guide preservation work. These Standards stress the importance of retaining and protecting the materials and features that convey a property's historical significance. *The Secretary of the Interior's Illustrated Guidelines for Rehabilitating Historic Buildings,* Accessibility Considerations section will be used in the design process. When new features are incorporated for accessibility, historic materials and features should be retained whenever possible.

Accessibility modifications will be in scale and harmony with the historic property, visually compatible, and, whenever possible, reversible. Reversible means that if the new feature were removed at a later date, the essential form and integrity of the property will be unimpaired. The design of new features will also be differentiated from the design of the historic property, so that the evolution of the property is evident.

As an example of the design alternative process, the entrance to the main house from the parking area and through the reconstructed Cornell orchard requires the visitor to step over a six inch 1930s historic concrete curb. Wheelchair access is not possible from this route. Therefore, this important detail must be evaluated through a series of options for preservation:

A. Option 1:
Provide a ramp to either side of the curb for a distance of four (4) feet. The ramp would be made of concrete and not exceed a slope of 1:20 (5%), otherwise handrails would need to be installed. These modifications would be reversible although it visually affects the roadway entrance to the orchard.

B. Option 2:
Lower the curb at this section to allow wheelchair access. This modification is not reversible but allows a portion of the visual integrity of the roadway entrance to remain.

C. Option 3:
Leave the curb as is and provide an alternate route to the entrance through the east side of the Ranch House.

There are several conditions of this type throughout Rancho Los Cerritos and each one would need to go through a similar evaluation once a visitors' program is established. All consultations should involve members of the local accessibility community.

D. Americans with Disabilities Act (ADA) Access:
A unique characteristic of the site is the various grade changes throughout the site and multiple floor levels. However, equal accessibility needs to be addressed at all public facilities. Full accessibility throughout the site requires a considerable number of rampways in the main house. The ramps are conceptually planned to be without handrails, meaning that they cannot exceed 5% slope. There are various opportunities throughout the site to accommodate wheelchair access without dramatically affecting the site's integrity.

The Proposed Master Plan: Wheelchair Access for Persons with Disabilities, outlines a conceptual route of travel through the site and building. This route was developed and reviewed with Dolores Barrows, ADA Compliance Officer, City of Long Beach; Angel P. Fuertes, Senior Civil Engineer, City of Long Beach; Frank Sanchez, Assistant Civil Engineer, City of Long Beach; L.G. Ng, BOA Architecture; and with members of the Cultural Heritage Commission.

An earlier review of the site for accessibility issues was made in 1991 by the City of Long Beach. Many of these issues have not been addressed due to lack of funds.

Persons with disabilities will drive onto the site and park in designated areas adjacent to the Visitor's Center. A fully stabilized decomposed granite surface walkway will lead the visitors to the Center. From the Center, a decomposed granite surface will take the visitors past the replanted orchard and onto the brick walkway on the south and east sides of the house. Maximum line of travel slopes of 5% and crosslopes of 2% along the path of travel should be maintained. Several areas of the brick paving will need to be repaired so as to not cause a trip hazard.

An alternate path of travel from the Visitor's Center will be along the roadway (closed to public traffic) to gain access to the barnyard. The slopes in this area may need to be improved to meet minimum accessibility standards.

Several areas of Cornell's back garden to the east of the house appear to be accessible. The path widths should be a minimum 36" and it appears that with little modification the widths could be achieved. The very low walkway to the north end of the garden against the brick wall is not accessible.

The area to the west side of the site planned as the California Native Garden is not accessible by wheelchair. This area, however, could be viewed from the elevated private roadway while in a wheelchair.

The historic flagstone steps to the inner courtyard will not be altered. A "crossover" at the center of the courtyard running north-south should be constructed of flagstone with a maximum 5% slope (no handrails) and will blend into the brick verandahs. The grass and the walkway should be level with one another. The raised patio area at the east end of the courtyard could receive a 2" high wheel guiderail to deter wheelchairs from going over the edge. The 2" guiderail could be attached to the side of the walls and covered with planting to hide the rail and provide additional clearance away from the edge of the patio for visitors. The half-round area looking down to the pool could receive large landscaping pots to deter wheelchair entry.

The non-complying concrete ramp over the original south stairway should be removed. The original stairs should be reconstructed. All of the stairways should receive a handrail to compliment the architecture of the Rancho and meet the intent of the accessibility standards.



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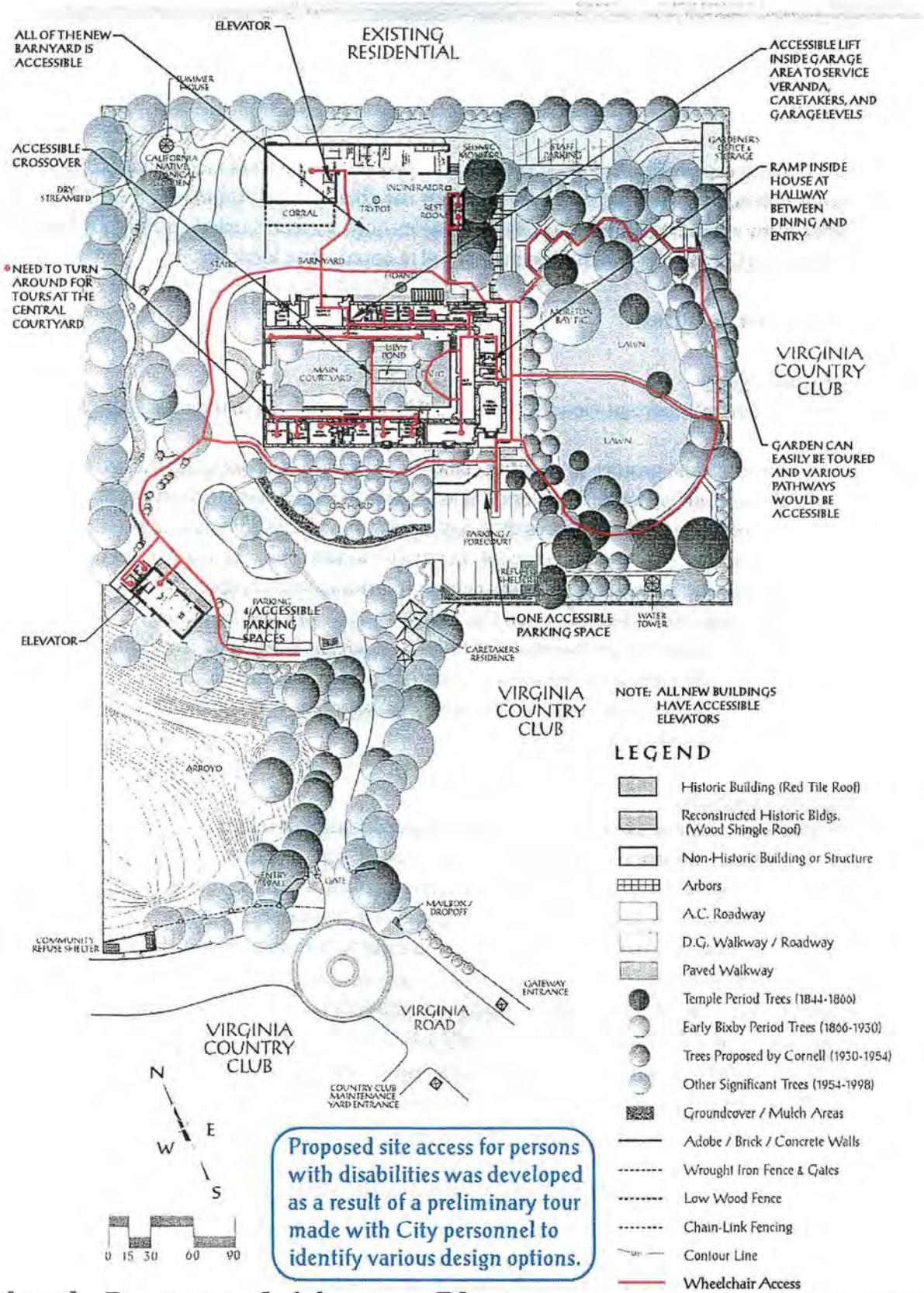
Exterior entry thresholds to the rooms from the brick verandahs will need to be modified for wheelchair entry. The 1-1/2" high wood thresholds could be sanded to provide a maximum 3/4" height and tapered back towards the brick veranda. This modification was used successfully at the Orange County Courthouse and at Mission La Purisima and is in keeping with *The Standards.*

Limited portions of the brick verandah should be raised approximately 1" to 2" up to the bottom of the thresholds.

Once inside the ranch house, a wheelchair lift should be installed adjacent to the garage and stepped-up floors. The interior hallway of the existing Caretaker's suite can be utilized by wheelchair users to access the lower and upper levels of the House and the exterior verandahs and patio.

The hallway between the dining room and the main entry to the house could receive a wood ramp to provide wheelchair access from the upper level to the dining room and patio level. It was felt that this ramp would have the least impact on the house and on this location and eliminate the need for the portable wood ramps. Portable wood ramps are not acceptable by persons with disabilities since the installation of these ramps is required by others. Independent access is desirable.

All new buildings on the site will comply with accessibility standards. The consensus was that the route of travel and proposed modifications would be acceptable with a greater refinement of details once the time came for implementation.



Proposed Master Plan: Wheelchair Access for Persons with Disabilities

Rancho Los Cerritos Master Plan



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4.2.5 Signage

All on-site signage will reflect the site's theme. Appropriate materials include adobe, hand-forged wrought iron, ranch artifacts and wood lightly sandblasted and stained for a weathered look. Typography should be simple hand lettering styles only, surface painted and slightly faded. The Rancho Los Cerritos logo should be introduced at appropriate locations.

4.2.6 Restoration Features

A. Views and Vistas

There are several important views which should be preserved due to their interpretive values.

1. Preserve and protect all sensitive habitats and view corridors along the arroyo.
2. Restore and maintain the interior views within the inner courtyard and back garden areas. There are several large trees that may need to be selectively trimmed on an annual basis.
3. Screen out all views of adjacent residents' homes and Virginia Country Club with its parking lot to preserve the rural feeling. It is ironic that to capture the rural feeling, more trees need to be planted, when there were none at all in the beginning.
   a. Keep the site hidden with tall trees and shrubs such as eucalyptus, peppers and pittosporums. Seclusion is key to the illusion of isolation.
   b. Buffer noise and objectionable development with trees and plantings wherever possible.

B. Irrigation Guidelines

The landscape irrigation of the site is an important component of the site's infrastructure and will have a significant impact on maintenance costs of the Ranch. The goal will be to design as efficient a system as possible to reduce waste of water and meet the irrigation requirements of all plants as closely as possible. The Ranch is presently irrigated with portable sprinklers and a manual irrigation system. A detailed master irrigation plan was completed for the Ranch in 1994 by the firm, AIC. Further development by a qualified irrigation consultant needs to be undertaken to design a new irrigation plan. This plan should be revised in tandem with the master plan to help guide the overall expansion, repair and development of a fully automatic irrigation system. There are also some existing irrigation misting systems found in the back garden area that could be linked with the 1930 period and should remain. If these systems have historic value, they should be restored to their original interpreted use and integrated with the new system for demonstration purposes.

Due to the variety of plant materials and microclimates, the design of the irrigation system components will vary. Specific water requirements shall be carefully considered when connecting irrigation zones together. The perimeter of the adobe will need to be given special consideration with the irrigation system cautiously designed to avoid watering the foundations and spraying the lower walls.

Hand watering shall be limited and the ultimate goal is to have the site on a fully automatic underground irrigation system.

Many Southern California native plants need little water once established. Those plants that are drought tolerant will suffer from too much moisture which causes diseases or root rot. These could be irrigated by a drip system to provide supplemental water. Plants from riparian zones will get regular irrigation. The use of these types of irrigation systems would provide significant water savings by limiting overspray and placing the water close to the root zone.

The lawn, flower and ornamental planting areas will require water on a weekly basis and should be served by a fully automatic underground irrigation system. These areas include the 1930s backyard garden and lawn, the inner courtyard, entry, the perimeter landscape buffer area and the Virginia Road entry. The restored Cornell orchard shall be irrigated by flooding small irrigation ditches to simulate an old farming irrigation method for demonstration purposes. The most used system will be a subterranean low-flow bubbler system to provide deep and infrequent watering for the orchard areas. Most of the landscaping adjacent to the adobe was removed due to water movement into the adobe walls. Appropriate irrigation designs to protect these walls from unnecessary moisture would be an automatic subsurface system that sets the spray heads 60" to 72" away from the walls,or drip irrigation.

It is recommended that all lawn areas receive moisture sensors to improve irrigation efficiency and promote water conservation.

All systems will be valued and controlled as to plants with similar exposure, and cultural, topographic and soil requirements. The use of rain shut-off devices, moisture sensors, drip systems, low and matched precipitation spray heads and bubblers are recommended to reduce or eliminate hand watering. Plant containers, pots and smaller planted spaces could be irrigated by hand and/or drip systems. Irrigation of modern spray systems should be restricted to non-visitor morning and evening hours to keep from conflicting with general visitor use.

The following are irrigation design recommendations:

1. Irrigation systems should be automatically controlled, low precipitation rate systems designed in accordance with prevailing industry standards and codes.
2. Automatic controllers should be able to accommodate all aspects of the design, including a rain shut-off switch, multiple start times, a master valve switch, a water budgeting feature, and a connection to in-ground moisture sensors.
3. The controller units should be enclosed in secure, weather and vandal resistant, locking housings manufactured expressly for the purpose.
4. Spray sprinkler heads should be low precipitation type, with matched precipitation rates and pressure compensating nozzles. There should be no exposed or fixed riser type sprinkler heads. All sprinklers should be "pop-up" body types with minimum pop-up of 6 inches in lawn and 18 inches in shrub areas. Sprinklers in the lawn or at the perimeter of beds should use swing joints.



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5. The irrigation design should be "trimmed" or cautiously designed to avoid watering the foundations and spraying the lower adobe building walls, wood walls, and paving structures. Adjustable arc nozzles shall be used where required. No irrigation system should be within five to six feet of the adobe walls.
6. The design of the irrigation system shall minimize or consolidate sleeving under paved areas for laterals, mainline and wiring wherever possible.
7. City of Long Beach approved backflow prevention units are required on all irrigation systems. The installation shall comply with all applicable health and safety codes.
8. All above grade irrigation equipment shall be visually obscured from public view with vegetation, or enclosed in concealed or secret wooden enclosures.
9. Drip systems shall be designed for the mature size of the plant material to be irrigated, including the eventual rooting pattern. All necessary equipment and sizing for mature plant size irrigation should be installed initially, with future outlets for tubing capped until needed. Self-cleaning emitters should be used throughout.
10. All drip system pressure mainline and non-pressure lateral lines should be PVC plastic with only short secondary laterals of polyethylene tubing.
11. Water Reclamation: The City of Long Beach will not provide for the transfer of reclaimed water as a source for irrigation systems to Rancho Los Cerritos at this time. Reclaimed water is not recommended because its higher salinity is considered detrimental to long-established plant material, especially plants in heavy clay soil.

4.2.7 Plant Materials

The preservation and restoration of the plantings or similar items will revive the character and strengthen the ranch's theme. After the master plan phase, but prior to construction installation, certain design and product decisions must be made. The means of presenting the selected materials and their locations is through plans, detailed drawings, and specifications. The preliminary landscape plan and the final landscape construction documents both document selection and location of desired plant materials and outdoor hardscape features. The preliminary plans are generally less detailed and function as a presentation tool only, whereas the construction plans function not only as a presentation tool, but also asa bid document for a guide in the size, quantity of desired plant materials and as a bid document for a guide in the construction/ installation. In addition, they include information on size, quantitiy and desired plant materials.

A licensed Landscape Architectural consultant should develop a detailed landscape plan for the Ranch that follows the enclosed conceptual landscape plan. The consultant needs to be familiar with Ralph Cornell and his past landscape designs that typify his unique style of plant design. Rancho Los Cerritos also has extensive garden inventory records and tree assessment forms which document the historic landscape conditions and therefore provide valuable records for justifying reconstruction of any non-surviving cultural landscapes. These records should be re-evaluated annually or bi-annually to maintain historic accuracy and document current conditions.



It is recommended that the scope of the detailed landscape plan include the following areas:

- Virginia Road Entrance and Driveway
- Visitor's Center
- Perimeter Landscape
- Arroyo/Open Space
- Restored Orchard
- Virginia Road Streetscape
- New Caretaker's House
- California Native Garden
- 1930s Garden Areas/Courtyard
- Backyard

The scope of the detailed landscape plans should include the following considerations:

A. All trees planted prior to 1954, or replanted since 1954 per Cornell's plan, should be retained unless irrevocably diseased, dead or environmentally impossible to replant.

B. Consistent and vigorous attempts should be made to control insects, pests and diseases of the mature trees using the least toxic methods possible.

C. Any major trees which have died or are declining should be replaced in kind only if or when the location can support it. The replacement tree should be as large a specimen tree as financially possible. Younger trees that grow and adapt faster should be considered.

D. All shrubs, succulents and herbaceous perennials which are healthy and evidently planted before 1954, or replaced since 1954 per plan, should be maintained by pruning or replanting from developed cuttings at participating off-site nurseries.

E. The use of photograph collections should be used wherever possible to assist the design of new plantings to approximate the affect of the 1930s time period.

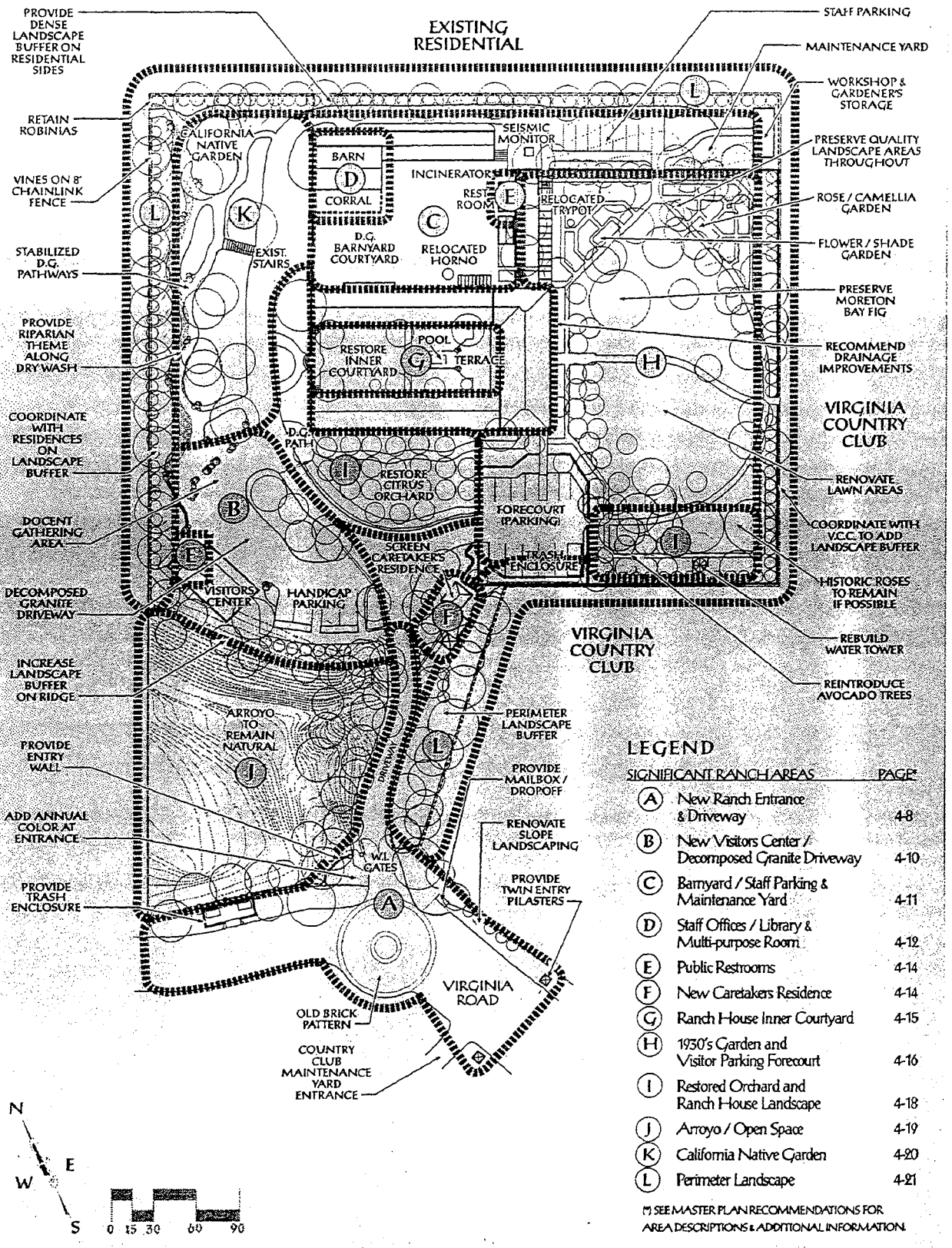
F. New plant materials should be researched and selected from lists of plants (if available) which were available in California nurseries during the 1930s time period.

G. Unsuccessful plants should not be replaced. However, plants which give a similar effect (size, color and scale) and that have similar cultural requirements should be considered as alternate choices.

H. New species or recently introduced cultivars should not be used unless no other choice exists.

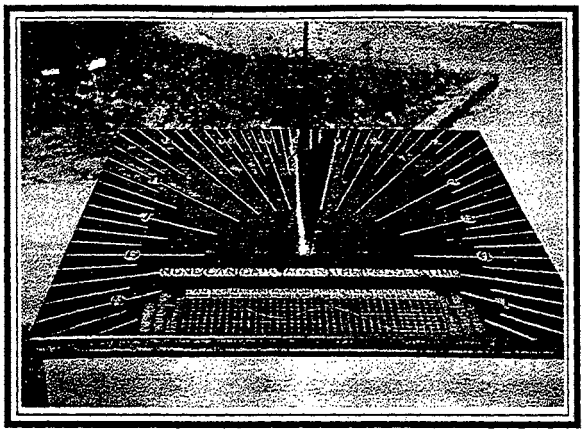
I. Any trees not appropriate to Cornell's plan but appropriate to the historic period shall be allowed to live out their natural life. However, once these trees die, staff should consider replacement with one of Cornell's.

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Landscape Concept Plan

Rancho Los Cerritos Master Plan



Sundial. Photograph courtesy of Architect Milford Wayne Donaldson, FAIA.

4.2.8 Artifacts in the Landscape

A detailed study should be undertaken of all artifacts found at the site such as the trypot, planter pots, sundial and furnishings. The restoration of items or the reintroduction of items closely simulating those once used at the rancho, will restore the unique and personal character and ambience. It is recommended that the scope of artifact study include the following:

A. All artifacts which are intact should be returned to their original locations (through the use of photograph collections if possible).

B. A complete inventory of existing artifacts should be made and should include the following basic information:
   1. Description of object
   2. Dimensions and material
   3. Present location
   4. Current condition
   5. Required repairs or restoration

C. Replacement recommendations as appropriate

D. A list should be prepared of artifacts which no longer exist but which are known to have been present during the time period. Drawings and specifications for reconstruction should be prepared and include:
   1. Exact dimensions
   2. Material and color
   3. Surface texture

E. All work should be done by only skilled, experienced professionals.

F. A conservator should be consulted for recommendations for ongoing maintenance and preservation of artifacts.

G. Any artifacts added to the site since 1954 (i.e., the modern benches) and not considered to be related to the history of the site, should be documented and removed from the site.

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4.2.9 Site Structures and Paving

A. A complete inventory of garden structures which require repair or reconstruction should be prepared. The listing should include the following basic information:

1. Description of object with photographs.
2. Dimensions and materials.
3. Location.
4. Current condition.
5. Detailed drawings for required repairs or restoration.
6. Replacement recommendations as appropriate.
7. Priority (high, medium, low)



Backyard walkways. Photograph courtesy of Architect Milford Wayne Donaldson, FAIA.

B. Summary listings for repairs or restoration projects should be listed by priority level.

C. Drawings, specifications and cost estimates should be prepared for all high priority projects.

D. Classify projects according to the level of skill required for implementation. This will assist the choices made for the selection of experienced contractors or skilled volunteers.

E. Structural systems and materials used in repairs or restoration projects should reflect the character of the old structures as closely as possible.

F. All materials should be treated in advance for termite, rot and rust prevention, but care should be taken to avoid visual differences in final color or surface textures.

G. Color and texture of finishes should be accurately matched with the original structure.

H. Samples of finishes and materials should be submitted before construction.

I. Only skilled and experienced craftsmen should perform construction and repair work.

J. In all cases, the work should follow *The Standards*.



Cornell's drainage. Photograph courtesy of Architect Milford Wayne Donaldson, FAIA.

4.2.10 Site Drainage

A preliminary drainage review was completed by DMc Engineering in 1998. The items noted during the field review determined that a lack of drainage infrastructure has caused a number of drainage problems such as erosion from the Virginia Country Club above the driveway, planting areas, pathways, and puddling in the courtyards and lawn areas (especially near the east side of the adobe).

These problems need to be remedied through the installation of catch basins, area drains, trench drains and french drains. Trench drains should be located strategically to intercept water sheeting off of courtyards, driveways or slope areas towards activity areas and foundations of structures. The catch basins and area drains should be used where the slopes of areas are relatively level. Surface drainage should be positive and should be directed away from all structures. French drains should not be used adjacent to the adobe walls.

To accomplish these drainage recommendations, special efforts will be needed to conceal all new drainage structures or catch basins, as they were not part of the historic site improvements. Historic 1930s drainage systems should remain for interpretive features.

4.3 Maintenance Standards and Recommendations

The charm of Rancho Los Cerritos evolves from its development over a long period of history as reflected through its structures, including the old adobe structure, water tower, brick walls, mature locust trees and 1930s gardens. The weathering, growth and change all add to the timeless perception of maturity. Any changes made need to be carefully organized and prepared to preserve the appearance of age and maturity. The goal of the Rancho's Landscape Maintenance plan is to conserve and maintain as fully as possible, all areas and features of the landscape that were present from the historic period of the 1930s. In so doing, the long-term maintenance should have a clear relationship between the original landscape design and the on going maintenance practices. The intent of these recommendations is to insure that goals are met through proper maintenance.

4.3.1 Landscape Maintenance Contractor

A. Scope of Work - The Contractor shall provide at his/her own risk and cost, the labor, materials, equipment, supervision and transportation required to maintain the designated landscape areas in an attractive condition.

Additionally, the Contractor shall, at his/her own expense, retain the services of the following professionals:

1. Agronomist
2. Soil laboratory approved by the Rancho.

The above consultants shall evaluate and survey the condition of the landscape and submit written recommendations for corrective or remedial action to the owner. Evaluation intervals shall be as stated in the section below:

1. Contractor's Responsibility:
   - The Contractor shall possess all licenses and permits required to perform the work of this contract including C-27 Landscaping and Pest Control Advisor Licenses.
   - The use of chemicals shall conform to current City of Long Beach regulations. If chemicals are used, they shall be based on the recommendations of a licensed Pest Control Advisor.



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2. Extra Work
   - Contractor shall furnish the Owner with a written estimate for any extra work which may be requested during the contract.
   - No subcontractor will be used in the performance of the contract. The only exceptions will be for necessary specialized functions, such as automatic irrigation controller repair or pruning of trees over 20 feet in height.

3. Site Observations - Site observations should be made by the Rancho horticulturist, a consulting Landscape Architect, and an expert agronomist, at specified periods, to survey and evaluate the condition of the existing, installed and/or maintained landscape.

   - The specified intervals should be every six to twelve months.
   - During these observation visits, site observation should include:
     - •General maintenance practices
     - •Plant count, to assess replacement needs, annual color.
     - •Turf Thatching/Aeration
     - •Tree stake/ties observation
     - •Irrigation effectiveness and watering practices
     - •Pest control
     - •Root control
     - •Weed abatement practices
     - •Pruning practices
     - •Fertilizing program for all areas

4. Reporting Requirements - Every three months a written report by the Contractor should be made showing actual progress. Any plants in a state of poor health should also be noted. Watering schedules and moisture levels where problems are occurring should also be included in the report. All reports should be submitted to the ranch representative.

4.3.2 Architectural and Site Structures

A. Ranch House (Adobe)

The ranch house is the most important element to the site and should be seismically retrofitted to meet current codes. The costs to seismically retrofit the building will have a significant impact on the site. Repairs to the adobe structure should follow the recommendations of *Preservation Brief 5: The Preservation of Historic Adobe Buildings* by the National Park Service.

The current Visitor's Center, staff offices, archival storage, library, collections storage and caretaker's residence should be removed from the building. The ranch house should be used in its entirety for interpretive exhibits.



Ranch House. Photograph courtesy of Architect Milford Wayne Donaldson, FAIA.

B. Brick Walls

The brick walls were first painted in 1930, but were apparently not maintained by the Bixbys. The brick walls around the ranch and garden areas should be painted to match the original finish. Repair and/or rebuild the walls as required for safety and stability with compatible materials. Refer to *Preservation Brief 1: The Cleaning and Waterproof Coating of Masonry Buildings* and *Preservation Brief 2: Repointing Mortar Joints in Historic Brick Buildings* by the National Park Service.

C. Painted Wood Structures

Wood structures, such as the inner courtyard gate and the arbor should be rebuilt with wood that has been "aged." The rotted post bases should be replaced by using a "dutchman" detail (cut out a small portion of the post and replace it with a new piece). All new wood should be date stamped to distinguish it from original wood members. An application of a commercial, colorless wood preservative should be made periodically. These structures should be painted to match the same style and character of the original artifact, per photo documentation. Once a suitable formula and/or color is developed, it should be recorded for future use. Painted surfaces should be treated in accordance with *Preservation Brief 10: Exterior Paint Problems on Historic Woodwork.*

D. Artifacts

It is recommended that professional consultants provide a precise and prudent study of artifacts and furnishings. This study should include identification of existing and missing objects, as well as development of specifications for conservation, care, repair, replacement and replication. The benefits of restoring some of the artifacts that existed during the time period of the 1930s at the site will enhance the ambiance and personal adventure of each and every visitor's experience.

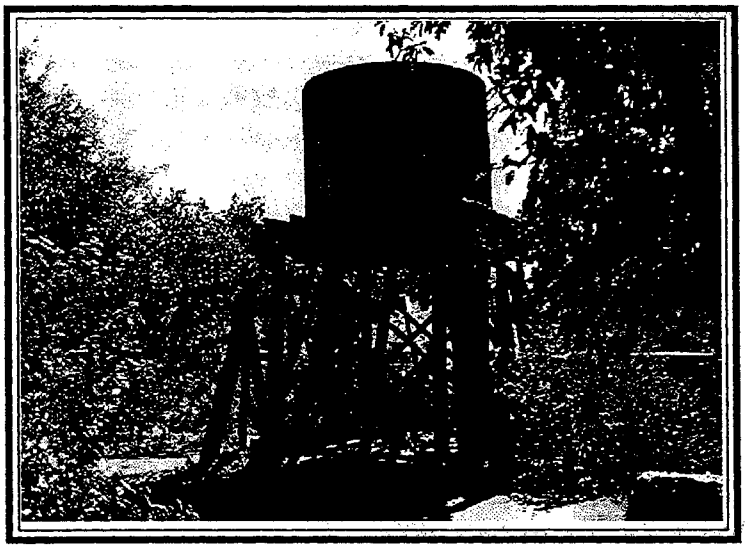
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Recommended Maintenance Inspections

ITEM	ACTIVITY	VISTATION OCCURRENCE
Site Drainage	Provide positive drainage away from the structure. Do not channel water. Do not provide subgrade drainage tiles. Do not allow water to stand or pond.	After each major rain. Every 3 months.
Weeds	Remove all weeds. Do not plant bushes, vines or irrigate within five feet of the structure.	1 month.
Rodents/Birds	Do not allow rodents to enter adobe. Correct immediately.	1 month
Foundation	Examine for moisture saturation. Examine for settlement or erosion.	After each major rain.
Exterior Plaster	Observe cracks larger than 1/8". Do not repair with commercial portland cement. Contact Architect when major cracks occur. Should a major earthquake occur, contact a Preservation Structural Engineer and/or Architect.	Monitor movement as required. No less than 1 month.
Sunporch	Check for cracks. Examine sunporch for water saturation through the clay tile pavers.	3 months
Clay Tile Roof	Check for cracking, swelling. Do not seal or paint.	6 months
Exterior Doors	Check for tight door, settlement. Check hardware, locks. Paint as required	6 months
Exterior Windows	Check for tight window, settlement. Paint as required.	6 months
Paint	Apply as per specifications. Verify with Architect alternate brands for paint.	As required.
Interior Concrete Floor/Pavers	Check for cracks. Do not use urethane or sealants.	6 months
Interior Wood Floor	Check for settlement buckling and shrinkage. Check for subterranean termites.	6 months
Interior Plaster	See Exterior Plaster. Do not drive nails into the walls to hang pictures.	3 months
Interior Doors/Windows-/Base	Check for tight doors, settlement, hardware. Paint as required.	3 months
Electrical Outlets	Remove cover at the meters and check power.	1 month
Security System	Check that all systems function.	Once a week

Some existing items and recommendations noted are:

1. Water Tower
   The tower should be rebuilt/repaired with wood that has been "aged." All new wood should be date stamped. An application of a commercial, colorless wood preservative should be made periodically. These structures should be painted and the color should match the same style and character of the original site theme, per photo documentation. Should be treated similar to the guidelines for painted wood structures.



Water tower. Photograph courtesy of Architect Milford Wayne Donaldson, FAIA.

2. Painted Benches (Not Historic)
   Should be treated similar to the guidelines for painted wood structures.
3. Iron Pieces
   Should be treated to prevent rust.
4. Benches, Furniture and Pots
   Seating areas should be kept in good repair by routine observations. All surfaces of the benches should be kept smooth and free of splinters. Unpainted benches should be treated with a commercial preservative occasionally.

In general, care should be taken to place all furnishing items on bases to prevent wood or metal-to-earth contact. Furnishings should be placed away from nearby irrigation systems.

4.3.3 Landscape

The goal of the Rancho's Landscape Maintenance plan is to conserve and maintain, as fully as possible, all areas and features of the site's landscape that were present from the historic periods.

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The following are maintenance recommendations:

A. Paved and Traffic Areas

The on-site paving should look old and worn without being unsafe to the general public. This is essential for public historic parks. Existing brick paving should be treated as per *Preservation Brief 1: The Cleaning and Waterproof Coating of Masonry Buildings* and *Preservation Brief 2: Repointing Mortar Joints in Historic Brick Buildings.*

1. Concrete

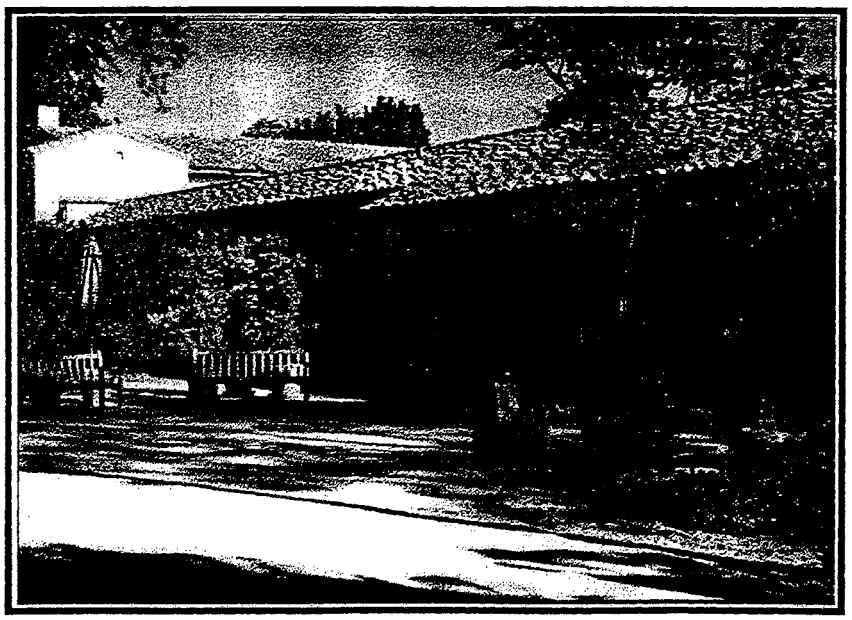
   Concrete for repair and replacement should match the existing concrete in color and texture. Samples of areas such as walks or curbing should be prepared in advance for review and approval before installation. All repairs should follow the recommendations of *Preservation Brief 15: Preservation of Historic Concrete: Problems and General Approaches.*

2. Flagstone and Brick

   Stone and brick pavers may work loose, crack, or become hazardous to the public. The paving areas should be monitored, with loose pavers reset immediately (such as the central courtyard or paved areas under the veranda). It is recommended, due to high visitor traffic, that brick pavers are reset in a concrete base. All replaced stones should reuse the same stone/brick or use similar ones. A reserve of old pavers should be stockpiled on-site for future repairs and replacements.

3. Decomposed Granite

   These surfaces will require maintenance to provide a safe, even and uniform surface. A vibrating roller should be used on a regular schedule to firm the surface and provide compaction.



Soil cement at garage area. Photograph courtesy of Architect Milford Wayne Donaldson, FAIA.

4. Resin Modified Paving

The resin modified emulsion decomposed granite pavement may need to be repaired on occasion. When undertaking repairs, some experimentation should occur to decide on the best or optimum mix specifications for stabilizing the special surfacing. Consideration should be given to the mixture that will best resemble the natural soil. There may be accumulation of silt and loose particles on the top of the decomposed granite that will naturally drain away with storm water run-off. Where areas of silt do not drain, they can be swept clean with a broom and deposited elsewhere.

5. Asphalt

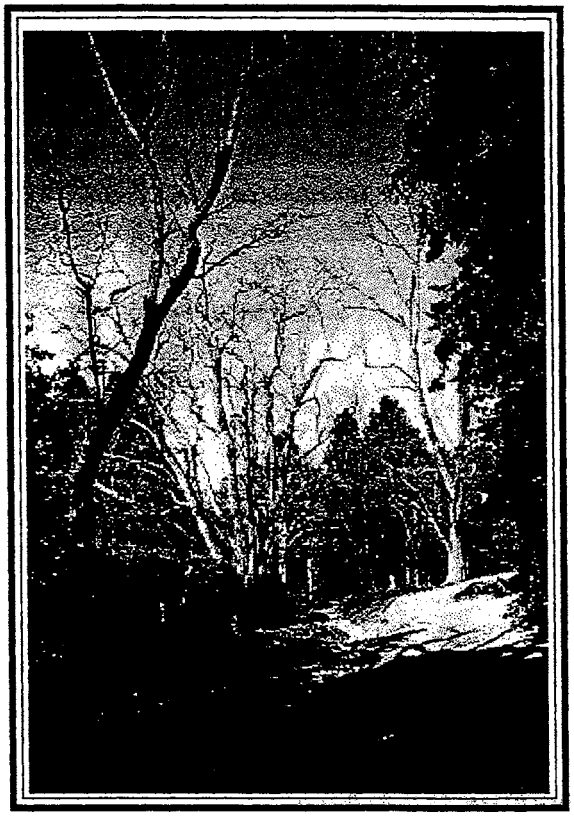
The 1930s asphalt driveway and parking area should be maintained and repaired as needed. If major repairs are contemplated, then those sections of the asphalt should be completely removed, archaeologically investigated and new asphalt with a properly designed base be installed at the original elevation.

B. Planting

1. Removal and Replanting

Some of the plants around the historic structures have died and/or been replaced with inappropriate species. Many of the large specimen plantings are mature and will require replacement in the future. These include robinias, olives and pepper trees.

As trees age, they become more susceptible to disease, often slowly declining before they die. The standard should be to remove a tree when the majority of its crown has died or been removed. Significant trees should be fully documented before removal, and then replaced with the largest specimen the budget and availability will allow, providing the evolved garden can support it in a healthy manner.



California native garden trail. Photograph courtesy of Architect Milford Wayne Donaldson, FAIA.

The selected specimens should match in species, character and structure. For example, standard trunk trees should not be replaced with a multi-trunk. Plantings should not be replanted if the environmental conditions determine otherwise, such as overcrowding, lack of sun or susceptibility to pests and disease.



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These landscape maintenance practices should be encouraged in augmenting this type of planting palette through replacement and/or adding of additional materials as necessary. All plants shall be of authentic character and quality in keeping with the Rancho's historic theme. Refer to landscape charts for recommended types of plant materials.

New landscape areas should be tested prior to installing any new plant material. Upon completion of all grading operations, soil samples (3-4 locations minimum) shall be taken by the Contractor and analyzed by a certified agronomic soil-testing laboratory. The results of these tests are to be reviewed by the specifying Landscape Architect for any required modifications to the soil preparation.

3. Soil Amendments

a. Soil amendments are defined as any substances used for the purpose of promoting plant growth or improving the quality of crops by conditioning soils solely through physical means. This centers primarily on soil improvement by improving water retention and permeability.

The proper soil is the foundation of a plant's life. Limited budgets are not an excuse when plant life is expected to beautify an area over extended periods of time. The soils encountered at the Ranch are generally granular ranging from silty sands to clayey sands and grading may generate some oversized rock.

b. No single amendment may be totally satisfactory, so a combination of amendments should be used. Sandy soils are benefited when amended with a humus type of material to increase water retention and nutrient-holding capacity. Clay and silt soils, in contrast, need fibrous-type materials to increase permeability and water retention. Humus may be needed to give better water and nutrient retention if the soil is low in organic matter.

c. It is generally ineffective to amend a soil using less than 25 percent by volume of amendment. Heavy use, high value and fine textured soils with poor structure may benefit from being amended up to 40-50 percent by volume.

Texture	Percent of Amendment
Sand	35
Loamy Sand/Sandy Loam	30
Sandy Clay Loam/Sandy Clay/Loam	25
Silt Loam/Silty Clay Loam/Clay Loam	30
Silt/Silty Clay/Clay	35

d. All plant pits should have backfill amended thoroughly as specified.

e. All new projects should be required to have soil analysis with submitted soil amendment recommendations by a certified agronomic laboratory.

f. A uniform soil mixture should be provided throughout the entire root zone. Thoroughly incorporate amendments into top 4"-6" of planting area soil depths.

g. The following are examples of turf and ground cover soil amendment rates. Amendments should be uniformly broadcast and thoroughly incorporated into the soil (6"-8" minimum) by means of a rototill or equivalent:

- Planting Backfill - Planting backfill should be a thoroughly blended mixture of excavated soil from the planting pits and soil amendments at the following sample mixtures:

Soil Conditioner	50%
On Site Soil	50%
Iron Sulphate	2 lbs./cu.yd.
Sulphur	1 lb./cu.yd.
Pre-plant Fertilizer	3 lbs./cu.yd.
Gypsum	4 lbs./cu.yd.
Sarvon	1 oz./cu.yd.

- Soil Conditioning, Fertilizing and Rototilling

•After the areas have been graded, the following rates of soil conditioning and amendment materials should be evenly spread over all planting areas, and be thoroughly incorporated to an average depth of six (6) to eight (8) inches by rototilling a minimum of two (2) alternating passes or by other approved methods.

Soil Conditioner	6 cu.yd./1,000 sq. ft.
Iron Sulphate	20 lbs./1,000 sq. ft.
Sulphur	10 lb./1,000 sq. ft.
Pre-plant Fertilizer	30 lbs./1,000 sq. ft.
Gypsum	100 lbs./1,000 sq. ft.
Sarvon	1 qt./acre (prior to amending soil)

•Soil tests may reduce or increase total soil amendment yardage (adjustment plus or minus may be necessary). The contractor shall obtain soil tests of final grade at the site and submit results to the Landscape Architect for interpretation and recommendation.

•The thoroughness and completeness of the rototilling and incorporation of the soil conditioners/amendments shall be acceptable to the Landscape Architect.



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4. Pruning

Due to the importance of this valuable botanical collection, pruning is essential. Staff has consulted with a professional arborist and maintains a schedule for pruning. Maintenance and liability concerns can be reduced enormously with annual or biannual survey/pruning work to avoid expenditures of unnecessary dollars at a later date. A tree survey report was completed at the Rancho in 1993 and should serve as a guide for future reports and maintenance work (See Finch's Professional Tree Management Program in Appendix 5.8 , dated February 3, 1993). In addition, the Rancho's own tree assessment charts should be updated every two years to maintain historic accuracy, preferably at the same time as the arborist's tree survey. Incident reports are completed as needed.

All trees, shrubs, vines and perennials should be pruned to enhance their natural form and habit of growth on a continual seasonal schedule. Branches should be cut individually. Cuts should be inside the outline of the foliage, and plants should be thinned out periodically. Mass shearing or limb stubbing should not be allowed. Gradual heading back to reduce size should be the preferred operation to maintain the natural outline and preserve the plant's structure.

5. Size

The reduction in size of plant materials should be done in phases, so as not to completely strip the plants of vegetation at any one time.

6. Weeding/Mulching

Weeds, including Bermuda grass, shall be removed from beds and lawns, completely and regularly, no less than once a month, and should be done manually. Bermuda grass and other noxious weeds should not be allowed to become established. Pre-emergent herbicides are not permitted, but post-emergent herbicides are acceptable, if necessary. The current Rancho policy is to use chemicals as a last resort, in order to protect the public and lessen environmental damage.

The area around shrubs should be kept completely clear of ground cover and excess soil. All weeds and debris should be regularly removed from the premises.

In all planting beds, organic mulch should be applied to conserve water, reduce weed growth, and enrich the soil. This mulch should be a non-contemporary composted garden refuse or leaf mold, rather than commercial type products, such as shredded bark.

7. Disease and Pest Control

The current Rancho policy is to follow an integrated pest management system to control insects and diseases. This control program will require constant attention, and the current integrated pest management system should be expanded.

This integrated pest management system requires a thorough understanding of the cultural and environmental factors that present insect and disease problems. This program is recommended because of the high public use, the close proximity of the residential neighborhood and the opportunity to serve as an example of environmentally sound maintenance practices.

The use of chemical sprays might be necessary to control some problems. Spraying should be done only when the air is still, preferably early in the morning. See soils report by Rancho Los Cerritos (February 1999) documenting past conditions identified and/or suspected for individual areas.

4.3.3 Irrigation

A. Equipment

All controllers, valve boxes, heads, and other equipment should be as inconspicuous as possible. If equipment cannot be hidden from view, its color should blend with the surrounding plant materials. All sprinkler heads should be a pop-up type. Heads on risers should not be permitted.

B. Scheduling

Controllers should be programmed to operate between midnight and six in the morning, except for drip irrigation systems. Irrigation should not be permitted during visiting hours.

C. Water Use

All irrigation should be kept to a minimum. The use of controllers, mulches, moisture sensors, bubblers and drip systems, and the scheduling of irrigation during non-peak hours, are good conservation practices. The use of vertical aeration and deep watering tubes around large specimen trees should also be considered.

The watering of slow growing or drought tolerant plant material should be monitored to discourage their susceptibility to disease and pests.

4.4 Security and Safety

The site is a significant cultural and historical site hosting architecturally sensitive structures and artifacts. Threats may come from natural or man-made sources. Fire, flooding, earthquake, vandals, or other trespassers will be predominant threats. Incidents may occur during public or private function times. The historic building, constructed of adobe brick, is inherently fireproof and is reasonably resistant to intrusion or vandalism. When constructed, the Visitor Center (Cota adobe) will have the same characteristics as the ranch house. The wood doors and windows, however, are easily prone to forced entry. The structure is intended to publicly display collections owned by the City of Long Beach and other contributors. These collections, whether of a large or small intrinsic historic value, must be held safe and secure at all times. Special security measures must be undertaken including audio, visual and electronic measures. However, security measures should not intrude upon the display of artifacts or facilities in order to maintain the site's



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historic integrity. Protection of the site, buildings, contents, staff and visitors will require appropriate, cost-effective measures. While the facility will be open to the public during the day, there may be some after-hours events. The on-site Caretaker will help to maximize security during the night and off-time hours.

The staff should be trained to manage on site personnel problems and to resolve minor issues. Opportunities for surveillance by either docents, staff, electronic and other technological systems need to be developed. An overall on site contingency plan should be revised to protect personnel and facilities. However, given the potential that the site's popularity and use will increase over time, the security of the site and public will need to be constantly reevaluated, at least on an annual basis. Any necessary improvements must be made without affecting the historic character of the Rancho.

A. Site Perimeter Protection

Due to the limitations of the site with low brick walls and chain link fencing (average six feet high) the site is not well protected. Persons can access the site at several locations. Unauthorized entries to the site have been at the following locations:

1. Main Entry Gate
2. North side of the site by the neighbors' properties
3. South side of the garden over the brick wall at the Virginia Country Club parking area.

Entry at the main gates has been by climbing over the hillside to the east of the gates or simply forcing the gates open by pushing.

It is recommended that a TV surveillance camera be located at the main entry to be monitored by the resident Caretaker after hours for special uses, and that an audible alarm system be added onto the entry gates.

B. Protection of Volunteers, Staff and Visitors

There will be a need of emergency on-site response to individual illness and accidents as well as to security issues. The existing Safety Manual should be revised periodically for staff and volunteers in case of emergency. All members should be trained and prepared in advance to handle various emergencies, including first aid, with appropriate on site emergency equipment. Remote, wireless call devices can be worn by docents in case of an emergency situation. The fire station is within one mile from the site with a response time of under three minutes. Paramedics are also available within a short response time.

C. Tours of the Ranch House

All facilities, at a minimum, should have the capability to contain protective devices, wiring and alarms within the building's structure and hidden from view. Some construction details of the Ranch House may need to be modified at the doors and windows.

Video monitoring could occur throughout the buildings with "covert cameras." It is recommended that motion detectors be installed throughout the house which are more effective than magnetic switches on doors and windows. These state-of-the-art technologies can provide appropriate protection with minimum staffing requirements or risk.

D. Exterior Fencing

It is recommended that new fencing with a minimum height of eight feet be installed with heavy, thick vegetation to deter possible intrusions from the public streets and the Virginia Country Club area. Fencing will not occur at Cornell's brick wall.

E. Door Locks

The doors could be retrofitted with a small deadbolt that has a four digit push button entry system. The code for the deadbolt could be changed on a regular basis and would be known only to staff members and volunteers. This type of lock allows the same degree of protection as a regular deadbolt but is easy to operate and does not require a key. Consideration should be given to alternative locking systems at highly-visible security doors as to not destroy the historic character of these doors.

4.4.1 Project Planning

It is important that protection planning for Rancho Los Cerritos be coordinated in a site Security Master Plan. This plan will include the needs and concerns of a wide variety of persons, including security advisors, police, fire marshal, museum staff, users and volunteers. The plans should address efficiency, cost-effectiveness and compatibility with project objectives.

A. Lighting

A detailed lighting plan will need further study. There are three types of lighting proposed:

1. Area or Safety/Security lighting - Illumination of entry/exit gates, gateways, parking lot driveways, walkways and maintenance areas.

2. Garden lighting - Minimal garden illumination using hidden or discreet pathway lights and indirect lighting of certain specimen plantings such as the Moreton Bay fig tree.

3. Event lighting - Illumination through use of temporary lighting at all event areas. All lights shall be controlled from a central control panel and be flexible for multiple systems of operation. Ranch personnel and future lighting designers should experiment with temporary or portable light fixtures to analyze which levels of lighting and fixture types are more effective. All lighting should be of authentic character and quality, out of respect for the site's history, and be sensitive to its residential neighbors.

B. Security/Communication System

All on site personnel and staff members should be equipped with state-of-the-art communication devices, such as short wave radios and/or beepers. These devices will assist coordination efforts and increase the effectiveness and productivity of an efficient, small staff.

Public telephones should also be located on site with locations at the Visitor's Center and at the barnyard area.



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C. Fire Protection

It is recommended that all of the buildings contain fire sensors, smoke detectors and fire sprinklers. The fire sprinkling system will provide maximum protection of both the building and site. The heads can be a pop-down recessed type, with water flow determined by heat sensors. Due to the large attic spaces and deep floor joists, a sprinkler system could be installed with minimum impact to the ranch's historical character. All new buildings will need to be fire sprinklered.

The existing standpipe will need to be replaced with a new fire hydrant to meet current City of Long Beach specifications.

D. Graffiti

Graffiti has been a minor problem at Rancho Los Cerritos. Should graffiti occur, *Preservation Brief 38: Removing Graffiti from Historic Masonry* should be reviewed.

4.5 Parking and Circulation

4.5.1 Site Usage

The site is used by drop-in visitors, scheduled tours, school programs, special events, volunteer committee work and other miscellaneous uses. Approximately 17,000 visits are made annually. It is recommended that no more than 35,000 visits are made on an annual basis to help protect the Rancho from abuse. The typical afternoon use varies from five to 75 visitors with the greatest numbers occurring on the weekend. Lectures and workshops attract 20-60 visitors, usually coming in small groups. Large events, normally in the afternoon, attract 400-750 visitors. These visitors park along Virginia Road and walk into the site. The Rancho normally provides assistance on those days. Events and programs that generate a high parking demand will need to rely on the management to utilize shared ride strategies such as shuttles, valet services, and on-street parking.

Two mornings a week the Rancho hosts 70 school children (combining two classes) who usually arrive in one school bus with some walking from the bus stop on Long Beach Boulevard and San Antonio Drive. Occasionally, private schools drive their students to the site.

4.5.2 Site Circulation

To enhance historical authenticity and improve visitor traffic, public parking should be limited to the historic 1930 forecourt built by Llewelyn Bixby, Sr. for guest parking. An exception will be the addition of four non-historic accessible spaces adjacent to the new Visitor Center. The parking status quo will be maintained during events, with overflow parking taking place on Virginia Road. Low interpretive signage and benches will be provided along the 1930 driveway to help prepare visitors for their "journey to the past." In addition, Rancho staff will seek funding for shuttles and off-site parking during large-scale events.

To provide for the much-needed Visitor Center (a reconstruction of the 1830s Cota adobe), the removal of the parking lot installed by the City of Long Beach in the late 1950s is required. Removal of this lot is also necessary to avoid cars driving through the pedestrian pathways, and to open vistas to both the reconstructed Cota adobe and to the 1844 ranch house. However, buses and cars will be able to drop visitors off near the entry, then park on Virginia Road. Eight additional parking spaces will be added near the maintenance area for staff use, and will not be visible to the public.

4.5.3 Parking Recommendation

The site currently parks 29 automobiles, spread between two parking areas. The recommended plan will park 24 automobiles inclusive of four accessible spaces. While this minimum loss of parking spaces is less than ideal, public workshop comments and review by the Master Plan Advisory Committee resulted in no acceptable on-site parking alternatives. The parking allowance is also driven by security needs, the need to create four new accessible spaces, aesthetic improvements, historical authenticity and a desire to preserve remaining views and the rural character of the site.

4.6 Implementation

4.6.1 Phasing

The Master Plan outlines a series of improvements to be made to Rancho Los Cerritos for the next 25 years. If all of the financial resources were available, the ideal approach would be to improve the Rancho at once. However, due to funding limitations, both for capital improvements, maintenance and operations, a phased development is proposed.

Normally, the best formula for phasing is to build specific parts of the Master Plan throughout, and not concentrate on one area only. The priority should be placed on orienting the visitor to the Rancho.

The phasing proposed for Rancho Los Cerritos is recommended in three phases. Refer to Appendices for detailed estimates and phasing. The general sequence is summarized as follows:

A. Phase 1 (1999 - 2004)

1. Install an eight foot high perimeter black vinyl chain link fence to be hidden by landscaping. The landscaping would provide visual screening from the neighbors. Plant new landscaping along the chain link perimeter fencing.
2. Install a new fire hydrant on-site and fire alarm system within the historic adobe.
3. Install an adequate security system for the interior of the Ranch House.
4. Provide off-site directional signage to the Rancho.
5. Implement seismic rehabilitation of the Rancho. Special care should be taken to plan the seismic retrofit around the future interpretive program improvements to the Rancho.
6. Implement seismic retrofit of the trash incinerator.
7. Restore inner courtyard area.
8. Demolish fountain and tiled "hacienda" courtyard.

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B. Phase 2 (2005 - 2014)

1. Construct new entrance gate, fencing, mailbox, community refuse shelter and paving at Virginia Road entry.
2. Construct new Visitor Center and attached restroom facilities (Cota adobe).
3. Reconfigure parking/forecourt for visitor's parking. Relocate refuse shelter to southeast section of visitor's parking.
4. Construct Caretaker's residence
5. Construct new parking and driveway and gate control on site.
6. Construct new interpretive signage along entrance roadway adjacent to the arroyo.
7. Install a site perimeter security system and expand the security system to the new structures.
8. Provide temporary parking area for staff at the rear maintenance yard.
9. Begin limited upgrade for compliance to ADA issues of accessibility for the adobe. Special attention should be made to meeting ADA requirements at the north wing.
10. Improve accessibility throughout the site
11. Plant the orchard garden.
12. Improve landscaping in the arroyo.
13. Plant the areas outside the brick courtyard walls on the Virginia Country Club side.
14. Repair of the brick wall around the garden.
15. Rehabilitate the present Visitor Center (gift shop/garage) for classroom use.
16. Restore the interior of the east wing and north wing kitchens.
17. Continue maintenance throughout the site.
18. Install new ADA lift at the classroom area for access to the verandahs and Ranch House.
19. Restore the interior of the adobe for the new interpretive program.

C. Phase 3 (2015 - 2024)

1. Provide Historic American Building Survey drawings for Cornell's hedge and lawn area to the north of the servant's quarters.
2. Demolish Cornell's hedge and lawn area, concrete parking pad and other features north of the Rancho.
3. Demolish existing herb garden.
4. Construct new barn complex consisting of staff offices, library, archives, collection, meeting area and restrooms.
5. Demolish the 1980s restroom facilities.
6. Construct new toilet building adjacent to 1930s Gardener's House.
7. Reconstruct Cornell's garden design to the south of the lawn area.
8. Reconstruct new barnyard for special events including fencing, ramada, horno, and other associated features.
9. Construct new staff parking near maintenance yard.
10. Construct workshop/gardener's storage structure.

11. Construct California native garden and herb planting area.
12. Installation of additional landscaping and irrigation associated with Phase 3 improvements.
13. Relocate trypot to the cutting garden in the backyard
14. Complete accessibility program to compliment the interpretative program both inside the Rancho and throughout the site.
15. Complete exterior improvements of the hardscape areas associated with Phase 3 improvements (paving, site furnishings, barnyard activity area, adobe walls, corrals, gates, site drainage system)
16. Restore the interior of the Rancho for the new interpretive program.
17. Restore the workshop room, temporary archives, library, upstairs office areas and north wing of office areas once the new barn facilities are constructed.
18. Restore and reconstruct the water tower.
19. Improve the area around the seismic monitor structure.
20. Address any necessary modifications to the earlier seismic retrofit work.
21. Update security system.
22. Continue maintenance throughout the site.

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PHASE 1 IMPLEMENTATION	Line Item Cost	CITY	RANCHO LOS CERRITOS FOUNDATION
I. CONSTRUCTION PHASE			
A. Site Work			
- Offisite directional signage	$ 30,300	$30,300	
- Demolish Spanish Courtyard	8,800	8,800	
- Perimeter Fence, Landscaping	108,731	108,731	
- Security, Fire Protection	26,860	26,860	
- Restoration of Main Courtyard/ADA	24,446	14,307	10,139
B. Historic Buildings/New Construction			
- Seismic Rehabilitation of Ranch/Paint	1,216,525	1,198,278	18,247
- Temporary relcation of collections	20,200	20,200	
- New Community Refuse Shelter	2,525	2,525	
- Seismic Retrofit of Incinerator	6,000		6,000
SUB TOTAL	**$1,441,387**	**$1,410,001**	**$31,386**
II. SOFT COSTS			
A. Design Architectural/Engineering 10%	$144,139	$141,000	$3,139
B. City of Long Beach Labor Burden 25%	360,347	352,500	7,874
C. Ongoing Maintenance Costs/Bldg., Grounds	46,000	46,000	
D. Additional Staffing	39,905	39,905	
SUB TOTAL	**$590,390**	**$579,405**	**$10,985**
PHASE 1 TOTAL	**$2,031,777**	**$1,989,406**	**$542,371**

PHASE 2 IMPLEMENTATION	Line Item Cost	CITY	RANCHO LOS CERRITOS FOUNDATION
I. CONSTRUCTION PHASE			
A. Site Work			
- Site Interpretive Signage	$ 13,500		$ 13,500
- Visitor's Center/ Landscape/Parking	73,350		73,350
- Landscaping and Irrigation, Orchard	23,372		23,372
- Archaeology Oversight	12,000	12,000	
- Virginia Road Gateway Entry	174,560	48,203	126,357
- Reconfigure Parking, Refuse Shelter in forecourt and maintenance area	27,000	27,000	
- Improve Arroyo/Open Space	59,083		59,083
- New Community Refuse Shelter	1,300	1,300	
B. Historic Buildings/New Construction			
- Construct New Visitor's Center (Cota Adobe)/Security	433,273		433,273
- Repair brick wall	3,200	3,200	
- Rehabilitate Old Gift Shop to Classroom	16,250		16,250
- Improve ADA Access	20,000	20,000	
- Restore east wing and north wing/Kitchen	20,000		20,000
- Construct Caretaker's Residence/Security	126,786		126,786
C. Ongoing Maintenance Costs/Bldg., Grounds	50,387	50,387	
D. Additional Staffing/Costumes	42,000	42,000	
SUB TOTAL	**$1,096,061**	**$204,090**	**$891,971**
II. SOFT COSTS			
A. Design Architectural/Engineering 10%	$109,606	$20,409	$89,197
B. City of Long Beach Labor Burden 25%	$274,015	$51,023	$222,993
SUB TOTAL	**$383,621**	**$71,432**	**$312,190**
PHASE 2 TOTAL	**$1,479,682**	**$275,522**	**$1,204,161**

Section 4 - Master Plan Recommendations

PHASE 3 IMPLEMENTATION	Line Item Cost	CITY	RANCHO LOS CERRITOS FOUNDATION
I. CONSTRUCTION PHASE			
A. Site Work			
- Construct California Native Garden	$ 100,879		$ 100,879
- Improve 1930s Main Garden Area/ Irrigation	44,000		44,000
- Improve Water Tower, Try Pot	1,800		1,800
- Demo hedge, conc., pad, etc.	5,000		5,000
- Landscaping and Irrigation	111,257	73,000	38,257
- Parking Hardscape, Furnishings	75,000	30,185	44,815
- Caretaker's Residence Landscaping	24,535		24,535
- Improve ADA Access to All Areas	15,000	15,000	
B. Historic Buildings/New Construction			
- Archaeology Oversight	25,000		25,000
- Construct Barn Complex	1,007,937		1,007,937
- Rehabilitate 1930s Gardener's House	3,000		3,000
- Construct Restroom/Demo Old	43,217		43,217
- Rancho Rehabilitation of Interiors for Interpretation	312,360		312,360
- Construct Gardener's Shed/Staff Workshop	46,000	46,000	
C. Ongoing Maintenance Costs/Bldg. Grounds	100,000		100,000
D. Additional Staffing/Costumes	54,545		54,545
SUB TOTAL	**$1,969,530**	**$164,185**	**$1,805,345**
II. SOFT COSTS			
A. Design Architectural/Engineering 10%	$196,953	$16,419	$180,535
B. Historic American Building Survey	3,500		3,500
B. City of Long Beach Labor Burden 25%	492,383	41,046	451,336
SUB TOTAL	**$692,836**	**$57,465**	**$635,371**
PHASE 3 TOTAL	**$2,662,366**	**$221,650**	**$2,440,716**

GRAND TOTAL (PHASES 1,2,3)	**$6,173,825**	**$2,486,578**	**$3,687,248**

4.6.2 Required Staff and Responsibilities

The development and operations plan provides many examples of staff responsibilities and tasks that will need to be completed or performed everyday. Currently, the site has a Historic Sites Officer, a Historical Curator, a Horticulturist, a Secretary, and an on site Caretaker. This strong core of experienced staff must be expanded to implement the interpretive plan.

4.7 Development and Operational Costs

4.7.1 Current Conditions

Presently, the site is owned by the City of Long Beach which administers the site through the Department of Parks, Recreation, and Marine. The City presently holds title to the site and provides the entire funding for its operations. In the past, Rancho Los Cerritos has received funding for limited capital improvements on site.

The Friends of Rancho Los Cerritos are a volunteer support group which assists the site with its public programming and supports the educational and preservation mission of Rancho Los Cerritos. The Friends' primary mission is to provide volunteer support for public programming and tours through an active docent program. The Friends support their activities primarily through donations, membership dues, special events admissions and sales at the museum shop. Funds that are raised are used to pay for the cost of goods sold at the gift shop, special programs, small curatorial and gardening projects, and publicity.

The Rancho Los Cerritos Foundation was formed in 1994 and received its tax-exempt status, allowing it to become active, in 1996. The Foundation is primarily tasked with fund raising and development. Activities of the Foundation to date have included funding this master plan effort, partial funding of a staff position for development, and initial marketing efforts for the site.

4.7.2 Facility Use Permit

The Rancho Los Cerritos Foundation has a Cooperative Agreement with the City which establishes its legal relationship, and was granted a facility use permit by the Department of Parks, Recreation and Marine. This permit allows the Foundation to use the site for Foundation-sponsored events, and may allow sponsorship of the use of the facility by other groups under its permit. This ability is not unrestricted, as events that take place must fall within the guidelines of the permit (which center around the historic site's educational mission, and public access to the park). In addition, the Foundation has created its own internal "site use policy" which currently includes the following stipulations:

A. Prohibition of commercial photography and filming on site
B. Closure of the site is permitted for private functions four times per year in acknowledgment of a significant donation to the Foundation ($25,000 or more)

Section 4 - Master Plan Recommendations

The Facility Use Permit allows the Foundation to effectively administer the fund raising activities that take place on site as an adjunct to the Foundation's primary mission of fund raising for enhancements, restoration and new construction.

4.7.3 Capital Investment Needs

The master plan calls for capital investments in six major structures.

A. The Ranch House including a seismic retrofit and interior restoration.
B. Reconstruction of the Cota Adobe to serve as a Visitor Center in order to move that function out of the historic adobe. The new structure would include room for a gift shop, orientation area and exhibit gallery with a video room, and volunteer office space.
C. Caretaker's building which would serve as a permanent on site residence for the caretaker.
D. New restroom buildings.
E. Reconstructed barn complex. This would be the largest element in the master plan and would include room for a library and the archives and collections of the site, administrative offices for staff, as well as approximately 1,200 square feet of assembly space for approximately 80 persons.
F. Improvements to existing outbuildings. This would mostly include marginal improvements to small structures on site.

SECTION FIVE
APPENDICES

SECTION FIVE • APPENDICES

5.1 HISTORY MONOGRAPH

Introduction

Rancho Los Cerritos Historic Site, an outstanding example of nineteenth century ranch life complete with the characteristic blend of Mexican and American architecture, offers a rare opportunity for visitors to examine both local and regional history. The spacious two-story adobe dwelling with delightful garden surroundings tells the story of an earlier time--when cattle instead of condominiums dotted the southern California landscape. Although lying within the city limits of Long Beach, its 4.7 acres plus an adjacent golf course give it a rural feeling in an otherwise closed residential area.[1]

Rancho Los Cerritos, with some twenty ground-,floor interior rooms and a spacious courtyard, possesses outstanding potential for interpretation of historical themes beginning with the period of Native American occupation and continuing through the romanticized Spanish Colonial Revival period of the 1920s and 1930s. The story of Native American occupation, Manuel Nieto's great land holdings, John Temple's initial efforts at cattle ranching, and the Bixby family's sheep-ranching enterprises coupled with other business ventures parallels the development of southern California into the economic center it is today. It clearly illustrates how "the pastoral ranch system of Hispanic culture retreated before large scale crop production, small farm subdivision, and urbanization brought about by Anglo-American settlers after California became a state."[2] With its present museum collections and trained staff, Rancho Los Cerritos--a visible reminder of an era gone by-should become one of the most visited historic sites in the southern California area.

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[1]The author would particularly like to thank Ellen Calomiris, Historic Sites Officer and Steve Iverson, Curator, Rancho Los Cerritos, for their assistance in providing research materials, helpful suggestions, and careful editing of the manuscript. Also helpful in this work have been Marie Barnidge-McIntyre, Horticulturist at the ranch; Sheriden G. Beebe, Chair, Rancho Los Cerritos Foundation; and Jean Bixby Smith, Financial Officer, Rancho Los Cerritos Foundation and President, Bixby Land Co. Their cooperation has made the task of preparing this history much easier.

[2]Kristen Brokate, The Bixby Family and Changes in Land Use in Southern California 1850-1900 (MA thesis, California State University Long Beach, 1992), p. 1.

The Native American Period - pre 1784

Archaeologists generally agree that proto-Asiatic types first migrated into the Western Hemisphere across the Bering Strait from Siberia to Alaska sometime between 50,000 and 20,000 B.C. They continued southward from the Arctic Ocean through Canada, some branching off eastward of the Rocky Mountains and others, between 12,000 and 9,000 B.C. continuing to California along the Pacific Coast. These Indians were probably organized into bands of a few extended families that numbered fewer than fifty people. In the earlier period, they relied heavily on large game for food, but by 3,000 B.C., Indians had diversified and were utilizing a variety of plant and marine life. This led to a population increase and settlement in permanent villages.[3]

After 3,000 B.C., other economic changes took place and the archaeological remains of mortars, pestles, grinding stones and mullers indicate that Indians then relied more heavily on plant sources. By the time of European settlement in 1769, the population of Upper California is estimated to have reached somewhere between 135,000 and 350,000.[4] They spoke some 135 different dialects that have been organized into six major linguistic groups: Algon-kian, Athabascan, Penutian, Hokan, Uto-Aztekan, and Yukian.[5] The lifestyle of the California Indians directly reflected the potential food supply, climate, terrain, and availability of water. Primarily hunters and gatherers, they subsisted on acorns, seeds, roots, fish, shellfish, insects, grasshoppers, deer and small game including rabbits, squirrels, and birds. Some practiced a form of proto-agriculture, which included environmental manipulation to the extent of scattering wild seeds, flooding certain areas, pruning or breaking of branches, or burning native vegetation to

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[3]See William J. Wallace, "Post-Pleistocene Archeology, 9000 to 2000 B.C." and Albert B. Elsasser, "Development of Regional Prehistoric Cultures," in Robert F. Heizer, ed. *Handbook of North American Indians.* Volume 8. *California* (Washington, D.C.: The Smithsonian Institution, 1978), pp. 25 to 57.

[4]See S. F. Cook, "The Aboriginal Population of Upper California," in Robert F. Heizer and M. A. Whipple, eds., *The California* Indians: *A* Source Book. 2nd edition (Berkeley and Los Angeles: University of California Press, 197 1), pp. 66-72.

[5]William F. Shipley, "Native Languages of California," in Heizer, ed., *Handbook of North American Indians,* pp. 80-81.

encourage growth of wild grasses.[6] They excelled in basket weaving, soapstone carving, plank-canoe construction, the making of sandals, preparation of animal skins for blankets and winter wear, and production of vegetable fibers for garments and other uses. The rendering of acorns as healthful food supply was also a highly developed skill involving the removal of the poisonous tannic acid. Acorn eating was probably the most characteristic feature of the domestic economy in the pre-contact period.

At the time of Spanish contact, the culture of Southern California included the Hokan-speaking Chumash of Santa Barbara and Kumeyaay of San Diego who lived north and south of the Uto-Aztekan (Shoshone) linguistic groups later designated by such mission names as Gabrielino, Fernandino, Juaneñio, and Luiseñio, and occupying the coastal plain of southern California.[7] The Gabrielino (or Tongva) were those living in the area of Rancho Los Cerritos.[8] They resided in semi-permanent villages consisting of domed, conical or rectangular houses built with wooden supports and covered with brush and thatched roofs. A smaller number of Uto-Aztekan speaking bands occupied the dry and stony Mojave desert and lived a life of hunting and gathering with some trade among neighboring bands.[9]

Some kind of religious ritual was practiced almost everywhere in California and the Gabrielinos were no exception. Ceremonies were usually accompanied by music and dancing.

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[6]Lowell J. Bean, "Some Explanations for the Rise of Cultural Complexity in Native California with Comments on Proto-Agriculture and Agriculture," pp. v-xlvii in Henry Lewis, "Patterns of Indian Burning in California," *Ballena Press Anthropological Papers 1*. Ramona, CA.

[7]See Bernice E. Johnston, *California's Gabrielino Indians* (Los Angeles: Southwest Museum, 1962), pp. 4,5.

[8]Hugo Reid, a resident of Los Angeles writing in 1852, placed the Gabrielino town of *Tevaaxaanga at* "Cerritos" or Rancho Los Cerritos near the present course of the Los Angeles River. See William McCawley, *The First Angelinos: The Gabrielino Indians of Los Angeles* (Banning: Mall-Museum Press/Ballena Press, 1996), p. 59.

[9]Lowell J. Bean and Charles J. Smith, "Gabrielino," in Heizer, ed., *Handbook of North American Indians,* pp. 538-549. See also Robert Glass Cleland, *The Irvine Ranch of Orange County* (San Marino: The Huntington Library, 1952), pp. 6-11 for a concise summary of Gabrielino life.

Beliefs centered around the creation of the universe, the idea of a supreme being, a concept of immortality, prevention of disaster, freedom from pain or hunger, and other aspects of daily life. The Gabrielinos, or Tongva people living in the area of Los Cerritos, honored a creator deity, Chinigchinich, symbolized by the raven and rattlesnake.[10] Rich oral traditions explained the creation of the universe, the origin of people, the introduction of fire, and questions of good and evil. Animals such as the Coyote, Rattlesnake, Bear, Eagle and Mouse were given human characteristics. Initiation rites in southern California, which involved the Toloache ritual, featured the use of jimson weed that induced supernatural visions or hallucinations. The ceremony involved the impersonation of spirits by the use of disguises representing several mythical characters.

The degree of authority enjoyed by the chief, who was definitely a civil official, is difficult to estimate. The office was hereditary in many parts of California, especially in the south. Chiefs were usually not all powerful but served in an advisory capacity. The person who often commanded the most respect, however, was the local shaman or medicine man. He used certain herbs, roots, and other remedies to cure various kinds of illness. Shamanistic practices were fairly uniform and frequently involved the removal of a disease-causing foreign object from the body. Placing a tube against the body and sucking out the "cause" of illness was common. Singing, dancing, and smoking tobacco were also used as diagnostic measures.

The sweat house or *temescal* was a typical California institution. A structure commonly used by men as a kind of assembly room or even sleeping quarters, it produced warmth directly by fire, not by heated stones. Many villages had one or more earthcovered sweat houses in which men spent some time daily followed by a plunge in a nearby stream. The Indians believed that

[10] Geronimo Boscana, *Chinigchinich,* in Alfred Robinson, *Life in California* (New York: Wiley and Putnam, 1846), pp. 230-341. See also McCawley, *The First Angelinos,* Chapter 8.

sweating was a means of keeping clean and healthy as well as becoming ritually purified.[11]

As long as the food supply was sufficient and territorial boundaries were respected, California Indians were mainly non-aggressive with a tendency to get along with their neighbors. Warfare, then, generally took place for reasons of revenge, not for plunder or desire for glory. Feuds often originated over the belief that a death had been caused by another tribe's sorcery or because of theft or kidnaping of women. Because of a limited food supply, the Indians devised various methods of population control such as abortion, the drinking of plant infusions to prevent conception, and infanticide. Deformed infants were usually disposed of at birth and twins were almost everywhere considered abnormal. One or both of such a pair might be killed. Disease also held population numbers in check.

Funeral practices and periods of mourning also varied throughout the Californias. Cremation and burial were divided fairly evenly and the distribution of these practices was irregular. Often a person's possessions were burned or buried with him, so no "inheritance" was passed on to the next generation. Although trade was common and certain items were used in a barter economy, the accumulation of wealth in the form of money or private ownership of land was not a common practice. Concepts and traditions brought to California by the Spaniards were often foreign to the native way of life and did not fit easily into the established culture.

Intermittent archeological work at Rancho Los Cerritos between 1957 and 1965 produced a rich Anglo-Mexican collection although grinding-stone fragments, awls, scrapers and other artifacts demonstrated a continuity in aboriginal forms. "The occurrence of lumps of clay and crude figurines added to the known historic presence of Indian women argues for a local production" and indicates that "domestic kitchen pottery continued to be native in origin. Thus

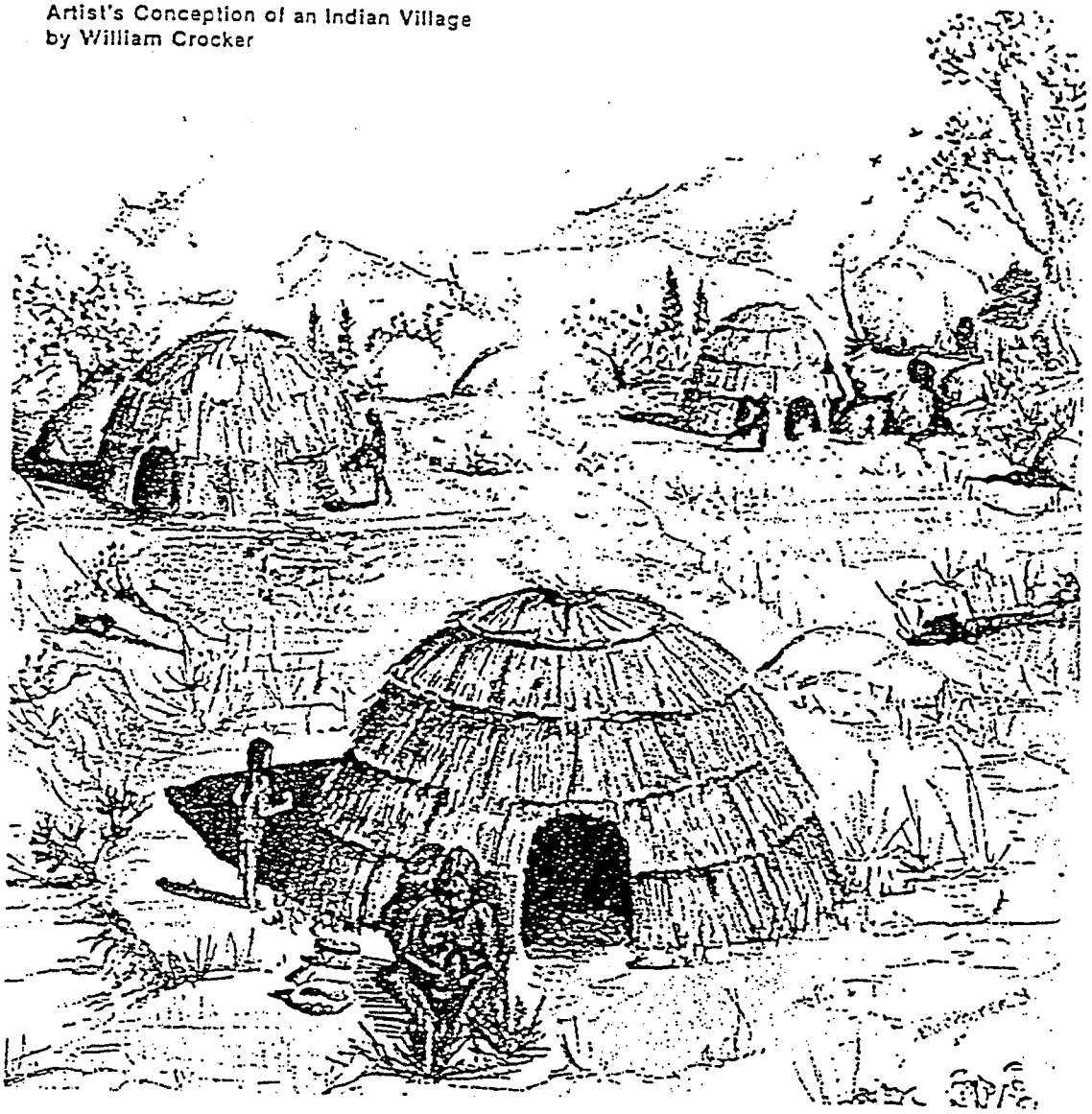
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[11] See A. L. Kroeber, "Elements of Culture in Native California," in Heizer, ed., *The California Indians*, pp. 33-69, for a complete description of cultural elements.

Rancho Los Cerritos has revealed a significant Indian contribution to California Mexican rancho society." [12]

[12] Heizer, ed., *Handbook of North American Indians*, p. 76. See also William S. Evans, "ARA Digs at Los Cerritos Ranch House." *Bulletin of the Archaeological Research Associates* 6(1)2-3), Long Beach, CA, and "California Indian Pottery: A Native Contribution to the Culture of the Ranchos." *Pacific Coast Archaeological Society Quarterly, 5* (3):71-8 1. Costa Mesa, CA.

Artist's Conception of an Indian Village
by William Crocker



The Rancho Period: Nieto and Cota families, 1790-1843

Although California was visited by Spaniards in 1542 (Juan Rodríguez Cabrillo) and 1602 (Sebastían Vizcaíno), it was not until late in 1767 that reports of Russian advancement to the north of California caused the Spanish king Carlos III sufficient unrest to advise the viceroy of New Spain to investigate the matter. Because the occupation of the northern country in 1769 was to be spiritual as well as for defense, with the founding of missions and conversion of Indians equally as important as establishment of presidios and pueblos, the expedition to California was led by Military Governor Gaspar de Portolá with the assistance of Franciscan Father Junípero Serra. With regard to the Indians, the expedition members were always to "exercise the greatest care not to exasperate or alienate"

them.[13] Father Serra oversaw the founding of seven missions by 1776, the year of American independence from England.[14]

Although missions and presidíos were the primary institutions founded during California's Spanish period, three civilian pueblos were also founded in the province: San José on the Guadalupe River (1777), Los Angeles on the Porciúncula (Los Angeles) River (1781) and Villa de Branciforte (1797) near present-day Santa Cruz. After 1800 a fourth feature of Spain's colonization program rivaled missions, presidíos, and pueblos for a position of prominence in California. The granting of large estates, called *haciendas or ranches,* had been practiced since the first Spanish settlements were made in the region of Santo Domingo on the Island of Hispaniola. The Laws of the Indies provided that sites *(sitios)* of one square league--4,438.464 acres--of grazing land could be granted outside inhabited areas to persons owning a minimum of

[13] José de Gálvez, Instructions for the expeditions to San Diego and Monterey, Ms. The Bancroft Library.

[14] See Irving Berdine Richman, *California under Spain and Mexico, 1535-1857* (Boston: Houghton Mifflin, 1911).

2,000 cattle.[15] Owners of six thousand head could petition for two sites and of ten thousand or more cattle, a maximum of three.

The grantee was further required to build a house on each site and provide a guard. Large private ranchos, as they were known in California, were a vital means whereby Spanish civilization could be extended into frontier areas throughout the Indies. Often they took on the characteristics of a small village.

Spanish settlers, coming from a country where the raising of cattle under semi-arid, plains conditions had long been a way of life, were particularly well suited to continue their ancient heritage in New Spain. The first cattle introduced into Santo Domingo multiplied rapidly and from there were taken to other islands and mainland regions. The Spaniards also gave the New World horses, sheep, domesticated goats and pigs. These animals made possible a large increase in the food supply of the Americas, although productivity soon outstripped potential demand and utilization. Herds of wild cattle became common in New Spain and the animals were killed primarily for their hides--a principal colonial export.

As California settlement achieved a measurable degree of permanence, several soldiers who had served in the province since the Portolá expedition of 1769 looked forward to retirement as independent cattle ranchers. Viceroy Antonio Bucareli's governmental reglamento of 1773 had envisioned that retired soldiers would be granted tracts of land within mission boundaries and thereby participate in the development of an integrated, carefully supervised civilian population. The first private grant was made in 1775 to Manuel Butrón, a soldier married to an Indian neophyte of Mission San Carlos. Butrón, however, soon abandoned his land, located near the mission, and no further applications were made for grants in the proximity of religious

[15]Recopilación de leyes de los reynos de las Indias (Laws of the Indies), Book IV, Title 17, Law 5. (Madrid, 1680).

establishments.

Not until 1784 was the system of private ranchos truly inaugurated in California. In that year Governor Pedro Fages received petitions from three members of his old command who sought tracts of unoccupied grazing land beyond the boundaries of Mission San Gabriel.[16] These grants, approved on November 20, 1786, were extremely large and covered a major portion of present-day Los Angeles and Orange Counties. Fages first assigned some sixteen square leagues, well over 75,000 acres, to Juan José Domínguez, a veteran of the San Diego presidio. Located to the southwest of Los Angeles between the San Gabriel River and some salt pits on Redondo Bay, the Doníinguez estate, known as Rancho San Pedro, faced the Pacific Ocean on the south and west. Juan José, who spent little time on the rancho, built a typical adobe structure with a wooden roof covered with pitch, and increased his herds to 3,000 mares, 1,000 fillies, 1,000 colts, 700 cows, 200 heifers and 260 bulls" by 1805.[17] Jose' Dolores Sepulveda, a friend of the Domínguez ranch manager, was granted permission to run several hundred cattle on the southwestern part of the original grant--a tract known as Rancho Palos Verdes. In later years, after the death of Juan José, the Sepulveda heirs received title to this valuable portion of the original grant.

The second grant, a triangular, thirty-six thousand acre site encompassing a major portion of today's cities of Glendale and Burbank, was awarded to José María Verdugo, also of the San Diego presidio. Verdugo received the giant tract, called Rancho San Rafael, under Fages' simple decree of October 20, 1784, which conceded him the permission that he solicited to "keep his cattle at the 'Arroyo Hondo' a league and a half distant from the Mission of San Gabriel on the

[16] Such grants were approved by Attorney General Galindo Navarro in an opinion to Jacobo Ugarte y Loyola, Chihuahua, October 27, 1785, California Archives 52, 809-813, The Bancroft Library.

[17] Robert Glass Cleland, *The Cattle on a Thousand Hills* (San Marino: The Huntington Library, 195 1) p. 9.

Monterey road....."[18]

The third rancho, the largest of the three granted by Governor Fages, was conceded to Manuel Pérez Nieto born in 1748 in La Villa de Sinaloa in Mexico. Nieto, a leather jacket soldier *(soldado de cuera),* accompanied the Portold-Serra expedition to Alta California in 1769 but remained temporarily at Mission San Fernando Velicatá in northern Baja California. He served at the Monterey presidio in 1773 and in San Diego in 1777 as a part of the Loreto Company. Nieto is listed in 1782 at the San Diego presidio as Spanish *(español),* married, age 34 and illiterate.[19] Nieto's petition, no doubt prepared by a corporal since Nieto could not read or write, stated that he had an increasing number of horses and cattle with no place to graze them and wanted to be assigned "a place situated at three leagues distant from the Mission at San Gabriel along the road to the Royal Presidio of San Carlos de Monterey named La Sanja (Zanja), contemplating Sir not to harm a living soul."[20] Governor Fages granted the land provided that "no harm was done to the Mission San Gabriel nor to the Pagan Indians of its environs in any manner whatsoever; and that he must have someone to watch it, and go to sleep at the aforementioned Pueblo."[21] Broadly interpreted, the boundaries of Nieto's property included all the land lying between the seacoast and "the main road leading from San Diego along the hills to San Gabriel," and from the Santa Ana to the San Gabriel River, which then emptied into, the sea near the present Long Beach-Wilmington boundary. Thus defined, the rancho contained nearly

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[18]U.S. Land Commission Case No. 403. See also Iris H. W. Engstrand, "California Ranchos: Their Hispanic Heritage," *Southern California Quarterly,* LXVII (Fall 1985), p. 290, n. 21.

[19]He married María Teresa Morillo, born in Loreto in 1756, and became the father of José Ignacio Ceslau (1776-? in childhood); Juan José (1781-1850); Josef Antonio (1785-1832); Antonia Maria de los Santos (1788-1796); María Manuela Antonia (1791-1836?); Antonio Maria (1796-1832). Nieto is listed as *mulato* in the 1790 padron. Nieto's wife also gave birth to José Antonio Zuniga in 1784, illegitimate son of Jose de Zuniga, Comandante of the San Diego Presidio from 17 to 17 .

[20]Petition and grant are in the National Archives, Washington, DC., Expediente No. 103 Santa Gertrudes. The translation is by George Tays and is quoted in W. W. Robinson, *Land in California: The Story of Mission Lands, Ranchos, Squatters, Mining Claims, Railroad Grants, Land Scrip, Homesteads (Berkeley:* University of California Press, 1948 [First paperback printing 19791), pp. 48-49.

[21]Expediente 103, Santa Gertrudes.

300,000 acres, but the padres at Mission San Gabriel complained that Nieto's property encroached upon their land so the grant was reduced in 1790 to 167,000 (or 158,000) acres.[22]

Nieto drove his stock from San Diego and settled first in the San Gabriel Valley at a place called La Zanja. By 1790, after several more moves, he settled permanently in an area southwest of present-day Whittier called Los Nietos. He built a square-shaped adobe dwelling and planted wheat and corn. His herds of cattle, numbering in the thousands, grazed in an ever-widening circle on the grass-covered plain stretching southward to the Pacific Ocean. On the west, they even intermingled with the cattle of Juan José Domínguez, resulting in a dispute over four thousand unbranded cattle, horses, mules and burros.[23] On the northwest, Nieto cattle reached the San Gabriel River, later the bed of the Los Angeles River, which marked the boundary between the Nieto and Domínguez properties.

When Manuel Nieto died in 1804, his widow María Teresa Morillo de Nieto and children stayed on the ranch as owners of undivided interests. After several petitions for a legal division of the property, [24] they divided their inheritance into six ranchos, grants for which were issued by Governor José Figueroa in 1834. These were the 27,054 acre Rancho Los Cerritos (or Sierritos) to daughter Manuela Nieto de Cota (patented December 7, 1867)[25]; the 28,027 acre Rancho Los Alamitos (patented August 29, 1874) and 48,806 acre Rancho Los Coyotes to Juan José Nieto (patented February 28, 1861); the 17,602 acre Santa Gertrudes to Antonio María's widow María

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[22]There is some disagreement over the reduced size of the rancho. The rancho lands later patented from the original grant reach nearly 158,000 acres, but the number of acres in Rancho Palo Alto is uncertain.

[23]George Tays, trans., *English Translations of Spanish documents from National Archives*, two bound, typescript volumes in the Bancroft Library, University of California, Berkeley.

[24]1817, 1825, 1827, and 1833.

[25]Married Guillermo Cota in 1805 as his second wife. She had thirteen children by him, twelve of whom survived to adulthood. She also raised Guillermo's four children by his first wife Manuela Lisalde. Guillermo's second child by his first wife, Josefa Cota, married Antonio Maria Nieto in 1815. Antonio Maria died in 1832 and was buried at San Gabriel.

Josefa Cota de Nieto in 1833 and 1834 and re-granted to Antonio María Nieto in 1845[26] (patented August 19, 1870);[27] and the 33,460 acre Rancho Las Bolsas to Catarina Ruiz de Nieto, (widow of second son José Antonio Nieto (patented August 27, 1877). Rancho Palo Alto, an area of land in Brea Canyon, was also granted to Juan José Nieto but never confirmed as a rancho. Juan José built an adobe home perhaps as early as 1806, since José Antonio Carrillo later recalled visiting there in 1807.[28] The rancho lands granted to the Nieto heirs today encompass, among others, the cities of Long Beach, Lakewood, Bellflower, Signal Hill, Downey, Norwalk, Santa Fe Springs, Whittier, Artesia, Westminster, Garden Grove, Huntington Beach, and Fountain Valley.[29]

Despite the immense acreage of these early ranchos, disputes arose among neighboring owners. Juan José Domínguez and Manuel Nieto quarreled for nearly a decade over ownership of the cattle that had intermingled, and heirs of the Domínguez estate vigorously protested the loss of Rancho Palos Verdes to Sepulveda. José Maria Verdugo promptly issued a warning to the mayordomo of Mission San Gabriel when the latter attempted to pasture sheep on his land west of the), Arroyo Seco; Verdugo obtained governmental permission to evict the mission animals. Normally, however, the rancheros led a peaceful existence and steadily increased their herds of livestock. They built rambling adobe houses, inhabited primarily by their own large families, and turned their ranchos into productive agricultural units.

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[26] Purchased in 1843 by Lemuel Carpenter, the property became the subject of a lawsuit by Nieto heirs in 1853. See *Nieto vs. Carpenter,* 7 Cal. 527 (1857); 21 Cal 455 (1863); see also Iris Higbie Wilson, "Lemuel Carpenter," in LeRoy R. Hafen, ed., *The Mountain Men and the Fur Trade of the Far West. Vol.* IX. Glendale: Arthur H. Clark Co., 1972.

[27] Home of Maria Josefa until her death.

[28] See W. W. Robinson, *Ranchos Become Cities* (Pasadena: San Pasqual Press, 1939), pp. 50-55. This adobe structure became the nucleus for the home that now stands on Rancho Los Alamitos.

[29] See Robert G. Cowan, *Ranchos of California: A List of Spanish Concessions 1775-1822 and Mexican Grants 1822-1846* (Los Angeles: Historical Society of Southern California, 1977).

Government regulations controlled Spain's cattle industry closely, even in outlying provinces such as California. A certain number of vaqueros were required to tend the cattle on unfenced ranges and each animal, whether belonging to mission, pueblo, or individual, had to be branded with a mark recorded in the official Register of Brands. Definite dates were set in the spring for the annual *matanza* or slaughtering of cattle for hides, tallow, and beef. At the same time the *rodeo,* or round-up, was held for counting, sorting, branding, and selling of cattle to other rancheros. Cows were strictly protected and a tax of two *reales* (about 25 cents) was levied upon each of the cattle killed. This source of income aided the treasury and prevented unnecessary slaughtering of animals. Under this legislation, and because of abundant pasturage in California, the herds multiplied. By 1790 the number of cattle had increased from an original 200 to some 27,000 head, with nearly 20,000 belonging to mission herds.

During the Mexican period (1821-1846) secularization of mission lands after 1834 made possible the granting of upwards of 600 ranchos extending from San Diego to the region north of San Francisco and into the Central Valley. Though the number of ranchos increased, the life and activities of the rancheros remained essentially the same until the American conquest. Although cattle ranching was the mainstay of the rancho economy, private landowners also engaged in varied agricultural pursuits. Verdugo planted a portion of Rancho San Rafael with hemp and diverted water from the Los Angeles River to cultivate beans, corn, wheat, onions, potatoes, and vineyards. At Rancho Santa Ana, the Yorb as produced similar annual crops, taking water from the Santa Ana River for irrigation. They also built a water-powered grist mill in the river bottom which furnished the ranch with flour and meal. Some rancheros employed Indian laborers under a foreman *or mayordomo* who, if capable, may have been an Indian himself. Some Indians became expert farmers and, despite their previous lack of experience with stock animals, took naturally to handling both horses and cattle. Thus, the California rancho became, ideally, an

integrated economic and social unit under the Spanish plan of frontier settlement.[30]

Judicial possession of Rancho Los Cerritos was awarded to Manuela Nieto de Cota in March 1835. Rafael Guirado, who surveyed the land, stated that it was inhabited and stocked and that there were "a house and corrals;" and some land planted in com.[31] Manuela and Guillermo Cota raised twelve children on the ample rancho which, in addition to cattle, had plantings of corn and wheat. Manuela, who died in 1837, left the rancho to her first born son, José Marria Cota, with the four remaining sons and four unmarried daughters receiving an interest in the property until married. Husband Guillermo became Executor of the Will and Pedro Domínguez, married to Maria de Jesus Cota, a daughter, assumed charge of Rancho Los Cerritos in January 1841.

[30] See Richard Batman, *The Outer Coast* (Orlando: Harcourt Brace Jovanovich, 1985), pp. 168-170.

[31] Case No. 351. U.S. Land Commission. Copy in the Rancho Los Cerritos Archives.

The Bixby Era - 1866-1890 - Sheep Ranching

Jotham Bixby took over as manager of Rancho Los Cerritos with an option to buy a one-half interest at any time. Bom in Norridgewock, Maine, January 25, 1831, Jotham was one of twelve children of Amasa and Fanny Weston Bixby of that town. His older brothers Lewellyn and Amasa Bixby, together with their cousin Dr. Thomas Flint, had arrived in California in 1851 via the Isthmus of Panama to join Flint's older brother Benjamin in the gold fields. Soon after, Jotham and brother Marcellus sailed from Maine around Cape Horn to join their brothers and cousins in California. The Flint and Bixby cousins also recognized the advantage of supplying meat to the mining camps, so they purchased a butcher shop in the mining town of Volcano located near Sutter Creek.[56]

Jotham remained in the gold diggings while Lewellyn Bixby and the Flint brothers returned to Norridgewock with enough savings to drive sheep and cattle overland to California. In March 1853, the three men traveled by rail to Terra Haute, Indiana, where they formed Flint, Bixby & Co. Around Quincy, Illinois, they purchased 1,880 sheep that they believed would be superior to those in Califomia.[57] After shearing the sheep in May and selling the wool clip of 6,410 pounds for $1,570 to Connable Smith and Company, the party began a ten-month drive across the continent. They arrived in southern California with 2,400 sheep[58] and camped for the winter near the former San Gabriel Mission. In the spring of 1854, they moved the sheep up the coast to Rancho Santa Teresa, south of San Jose, and remained there for 14 months. In October 1855, they purchased Rancho San Justo in Monterey County, which served as Dr. Thomas Flint's

[56] Stephen B. Dudley, *Bixby Family Guide* (Long Beach: Alamitos Land Company, 1996), pp. 3-19.

[57] The old mission sheep produced only two to two and one-half pounds per shearing of a coarse wool that sold for less than one-third the price of the wool from more productive breeds. The new wool growers imported Spanish and French Merinos.

[58] Some animals were purchased or bom along the way, although some were lost to trail hazards.

residence and headquarters for Flint, Bixby & Co. during the next forty years.[59]

In 1858, the company purchased Rancho Huerhuero near Paso Robles to augment their grazing land.[60] Lewellyn Bixby returned to Maine the next year, in 1859, and married Sarah Crosswell Hathaway, daughter of the Reverend George Whitefield Hathaway.[61] They returned to live in California just as slavery and other issues were dividing the Union. The wool industry, however, took an upward turn in the West because the outbreak of the Civil War in 1861 rendered cotton from the South no longer available.[62] Jotham Bixby, who had also returned to Maine for a visit, met Sarah's sister Margaret Winslow Hathaway. Another romance bloomed and Margaret traveled to California to many Jotham Bixby at Rancho San Justo in 1862.

Thomas and Benjamin Flint and Lewellyn Bixby, constructed a three-family ranch house at San Justo and resided there together for the next several years. Jotham and Margaret lived at their own place on the ranch.[63] Between 1864 and 1868, Flint, Bixby & Co. purchased Ranchos San Joaquin (50,000 acres), Lomas de Santiago (47,000 acres) and a portion of Santiago de Santa Ana (3,800 acres), three contiguous parcels that formed a major part of what would become today's Orange County. A new partner, James Irvine, held a one-half interest in the property and bought out Flint, Bixby and Co. in 1876.[64]

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[59]See Thomas Flint, *Diary of Dr. Thomas Flint: California to Maine and Return, 1851-1855* (Hollister CA: The Evening Freelance, 1924) and Ellen Calomiris, Outline of Historical Events relating to Rancho

[60]Rancho Huerhuero or Huerfano (orphan) in San Luis Obispo County was originally one league granted to José Mariano Bonilla in 1842 and 1844. Francis Ziba Branch was claimant for 15,685 acres finally patented October 7, 1862. See Cowan, *Ranchos in Alta California*, p. 40.

[61]The Bixby connection to the Mayflower is through the Hathaways---there are not two different connections (although it is always possible that there are other connections via earlier Bixby generations).

[62]The California Sheep & Wool Growers' Association was formed in 1860 to prevent monopoly in the wool market and promote the industry.

[63]Dudley, *Bixby Family Guide*, p. 19.

[64]See Robert Glass Cleland, A *History of the Irvine Ranch of Orange County* (San Marino: The Huntington Library, 1962). James Irvine came west in 1849 on the same ship as Benjamin Flint; by 1854 Irvine had become a grocery merchant doing business as Irvine & Co.

Since Flint, Bixby & Co. had purchased Rancho Los Cerritos in 1866, Jotham and Margaret Bixby moved south to occupy the ranch. Jotham purchased a one-half interest in Los Cerritos in 1869 and began operations under the name of J. Bixby & Co. In the meantime, Lewellyn Bixby's wife Sarah had died in 1865. He later married her younger sister Mary Hathaway in 1870 and remained at Rancho San Justo,[65] but in close contact with Jotham and Margaret, who became the parents of George H. (7/4/1864); Mary H.(2/16/1869); Henry L. (12/20/1870); Margaret H. (1/6/1873); Rosamond R. (9/13/1877); Fanny W. (11/6/1879); and Jotham W. (9/10/18 84). The two Bixby families spent considerable time together at Los Cerritos. The sheep business was excellent since the price of wool had soared to 45 cents a pound by 1871.[66] The Bixbys were able to improve the two-story central wing of their adobe ranch house by replacing the original flat and tarred roof with a New England style hipped and shingled roof by 1872.[67]

Sarah Bixby Smith, recalling her childhood days at Rancho Los Cerritos, wrote the

following description:

> Originally the roofs were flat and roofed in the usual southern California fashion, first a layer of redwood planks, then a covering of sand or gravel over which was poured hot brea (asphaltum) from the open beds beyond Los Angeles. These were the same brea pits in which in recent years the remarkable discoveries of prehistoric animal bones have been made....
>
> When the summer sun was hot on the roofs the asphalt grew so soft that we could dig it out with sticks and shape it with our fingers. Such depredations undoubtedly contributed to the unsatisfactoriness of the overhead shelter.... Uncle Jotham soon tired of dripping rain inside the house, no matter how much he prayed for it outside, so that very soon after he moved into the adobe he added a good old-fashioned Yankee roof to the main portion of the house. The roofs on the wings did not come until after I had learned the joy of the flat ones. Here we used to go at sunset to wait for
>
> the homecoming of the fathers, for whose returning buggies we could watch from this vantage ground. We also could see the whole sunset sky, and the lovely pink lights

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[65] Lewellyn had no children with Sarah but became the father of Sarah (8/19/1871--later Sarah Bixby Smith); Anne (10119/1874--later Anne Bixby Chamberlin) and Llewellyn (8/21/1879--later referred to as Llewellyn, Sr.).

[66] Harris Newmark, *My Sixty Years in Southern California* (New York: Houghton Mifflin Co., 1930), p. 437. See also Susan Lavia, "John W. Bixby: Sheep rancher, Farmer, Dairyman, in *The Branded Word* (Long Beach: Rancho Los Cerritos Museum, Summer 1986).

[67] Photograph of Rancho Los Cerritos, CHP 0241, taken by William Godfrey, Spring 1872, Rancho Los Cerritos Archives.

on far, faint Baldy.[68]

Mealtime was an important feature of the daily life at Rancho Los Cerritos. Staple groceries such as sugar and flour, beans and coffee, came from Los Angeles in wholesale quantities. Meat all came from the ranch, usually from a sheep that was killed daily but occasionally a beef was slaughtered. Breakfast consisted of eggs, meat, potatoes, hot bread, stewed fruit, doughnuts and cheese, and coffee. "Dinner came at noon and frequently began with soup, followed by a roast, potatoes, two other fresh vegetables, with pickles, olives and preserves.... For dessert there were puddings or pies or cake and home-canned fruit, and cheese."[69] Evening supper often featured oatmeal, creamed toast, biscuits with honey, jelly or jam, and perhaps cold meat. A variety of fruit, including oranges, lemons, figs, and grapes, grew in the garden, while the orchards produced apples and pears. Water was the chief beverage and sometimes tea or coffee, but never wine or other liquor.[70] The meals were prepared and served by two Chinese cooks, Ying and Fan. Ying, who was head cook, prepared six meals a day for as many as thirty people--three for the large Bixby family and three for the ranch hands. He trained Fan, who later became the cook at Los Alamitos. Ying and Fan slept on cots in a comer of the room north of the dining room.[71] The storeroom, next to the foreman's room in the south wing, held dried apples, chocolate, brown sugar and other ingredients used in cooking.

According to Sarah, "the approach to the house was through the large gate in the wall that

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[68]Smith, *Adobe Days,* pp. 62-63.

[69]Ibid., p. 65.

[70]Ibd., pp. 64-66 and 88; the Bixbys were generally opposed to the serving of alcoholic beverages.

[71]Anne Bixby Chamberlin to William S. Evans, Sept. 24, 1957. The Chinese continued to cook with native foods such as rice, dried fish and soy sauce. Archeological speciments found at Los Cerritos included fragments of soy sauce bottles. The Chinese celebrated tradifional holidays such as Chinese New Year with thousands of firecrackers.

closed the patio."[72] Apparently the courtyard, with the exception of a few locust trees and a large pink oleander, was not planted to any great extent and held several hitching posts for the saddle horses.[73] The garden was on the farther side of the house. The milk room, "the last of the series, opening into the court-yard," contained "rows of shining pans" filled with cream both for churning and for the table--"clotted cream thick enough to spread with a knife upon hot baking powder biscuits, or a steaming baked potato."[74]

Other relatives to join Jotham and Margaret at Rancho Los Cerritos were Susan Patterson Hathaway who in 1873 married John Bixby, a twenty-four year-old former school teacher from Anson, Maine.[75] Although the newly wedded couple moved to the port town of Wilmington,[76] John continued to work on the ranch, which was described by the *Los Angeles Star* of September 5, 1874, as follows: "One of the most thoroughly and systematically managed sheep ranches of this country is that of J. Bixby & Co. known as Cerritos or Little Hills, taking its name from a mound-like elevation at the Southwestern extremity of the ranch. It is what is known as a five-league ranch, embracing about twenty-five thousand acres, about equally divided into mesa, or upland and bottom-land." Jotham Bixby had at that time 30,000 sheep--all Spanish Merinos[77]--of which 25,000 belonged to the company. They averaged ten pounds of wool each per year with

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[72]Smith, *Adobe Days,* p. 64.

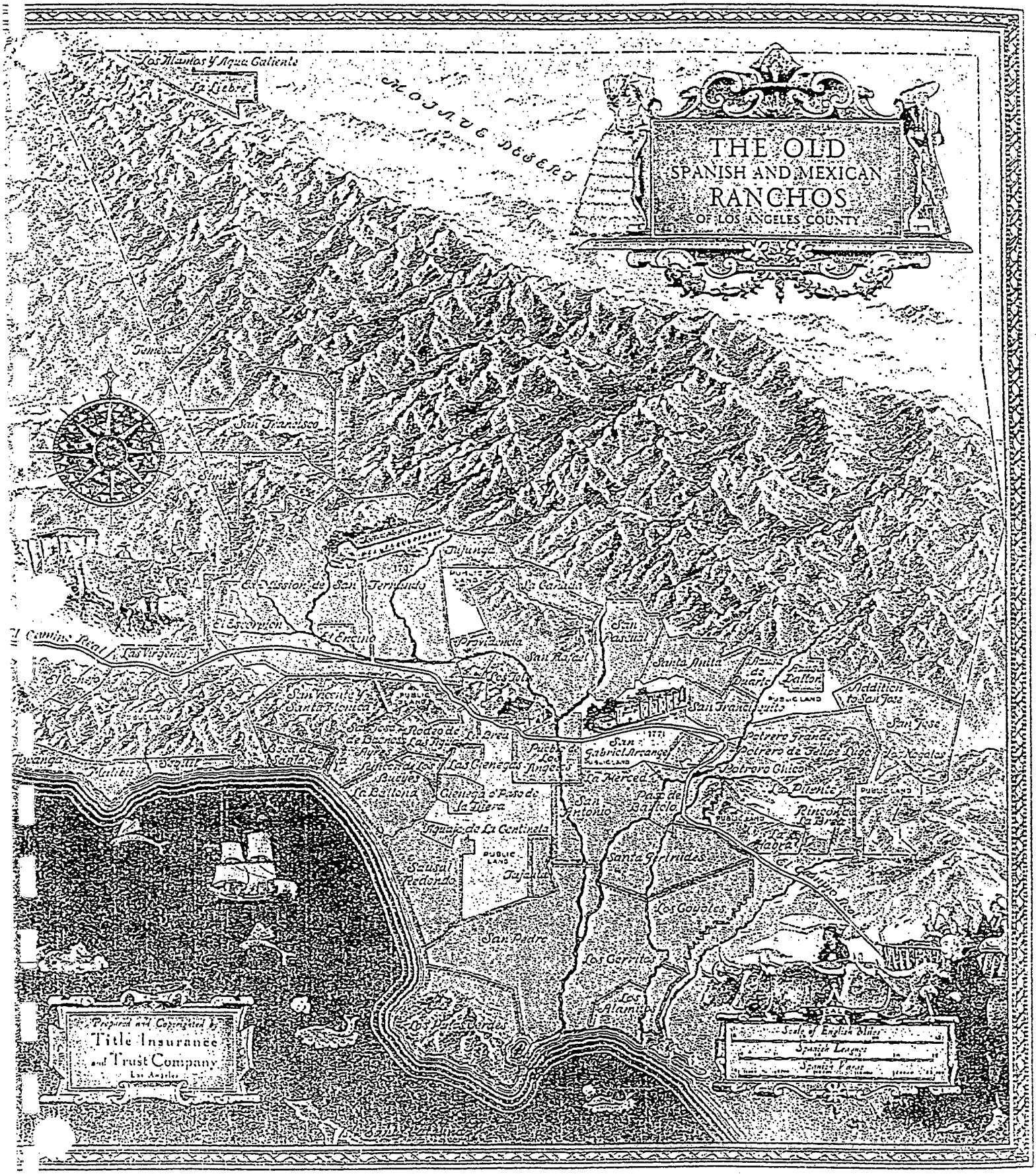
[73]Surviving from this period are two *Ficus macrophylla* planted close together in a raised bed. See Barnidge-McIntyre, "Rancho Los Cerritos," p. 12.

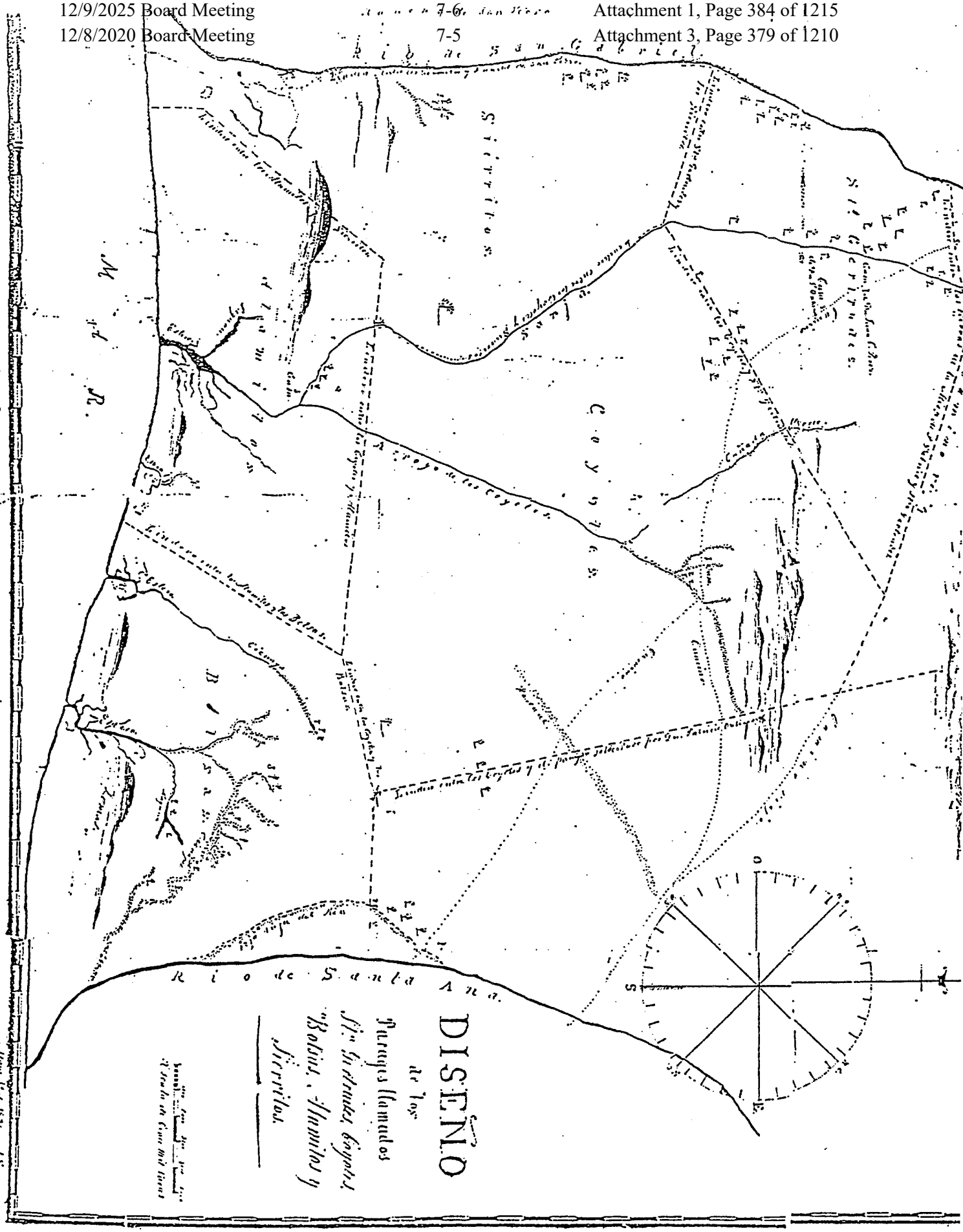
[74]Ibid., p. 66.

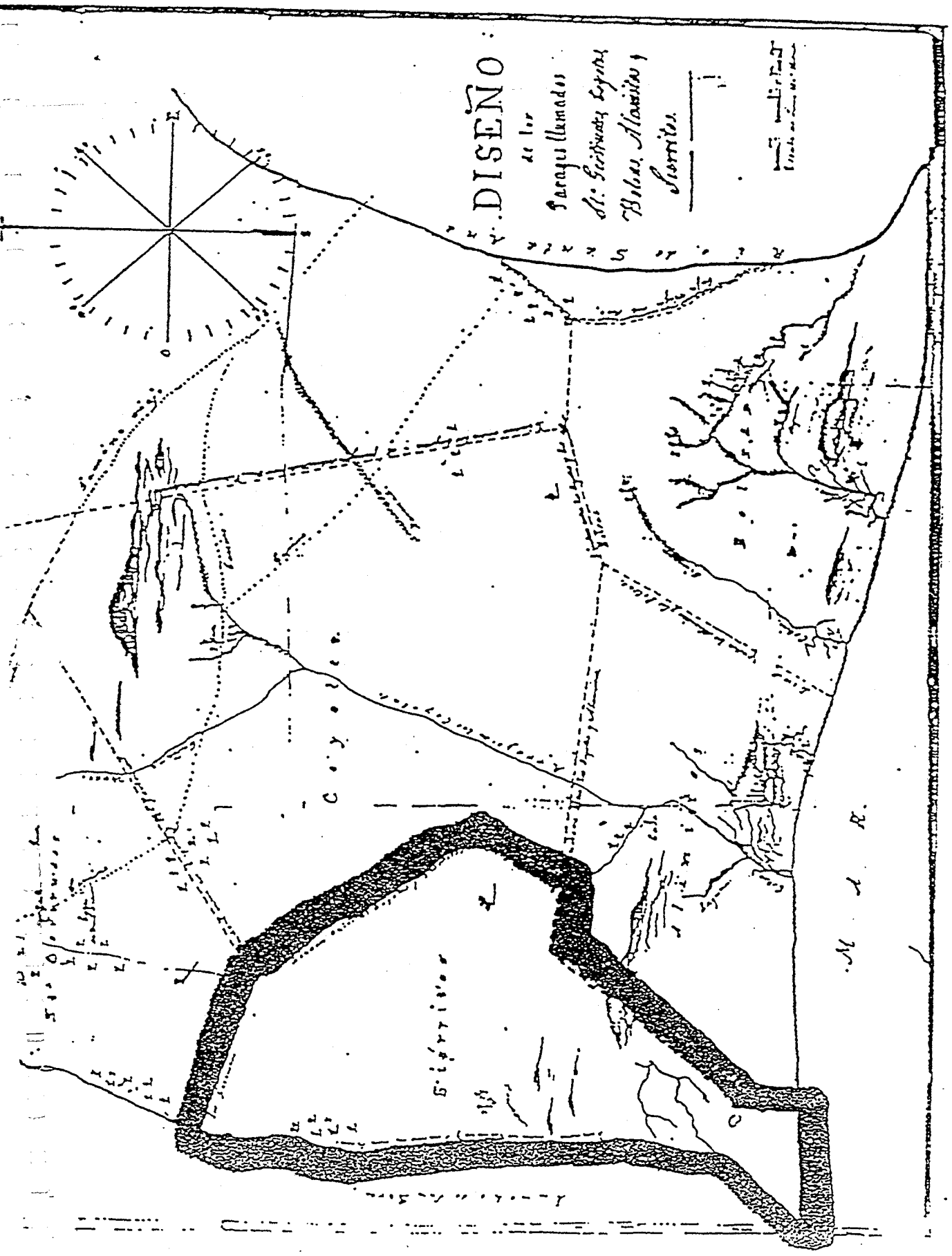
[75]John, another Bixby cousin, was born in 1848-- the ninth of ten children of Simon and Deborah Flint Bixby of Anson, Maine.

[76]John continued to work at the ranch until 1878 when the couple moved to Rancho Los Alamitos. They had two children, Fred Hathaway Bixby (1875) and Susanna Bixby (Bryant) 1880. In 1878, 1,419.09 acres of Rancho Los Cerritos were surveyed as a tract known as the "Wilmington Colony." Survey recorded May 25, 1881.

[77]Spanish Merinos "have a strongly developed flocking instinct can tolerate dry range conditions, and are famous for their fine wool." See Paul W. Gates, ed., *California Ranchos and Farms 1846-1862* (Madison: The State Historical Society of Wisconsin, 1967), pp. 36-38.


THE OLD
SPANISH AND MEXICAN
RANCHOS
OF LOS ANGELES COUNTY
Los Alamos y Agua Caliente
La Liebre
Mojave Desert
San Francisco
Tejunga
La Canada
El Encino
San Pascual
Santa Anita
Rancho Dalton
Addition to San Jose
San Francisquito
Potrero Grande
Potrero de Felipe Lugo
Potrero Chico
La Ciudad
Rincon de la Brea
La Habra
Rancho San Jose
Rancho Los Nogales
La Merced
Paso de Bartolo
San Antonio
Santa Gertrudes
Los Coyotes
San Pedro
Los Cerritos
Los Alamitos
Los Palos Verdes
Rancho Sausal Redondo
Rancho Tajauta
Rancho La Centinela
Rancho Las Cienegas
Rancho Rodeo de las Aguas
Rancho Boca de Santa Monica
Rancho San Vicente y Santa Monica
Rancho Las Virgenes
El Camino Real
Malibu
Topanga
Prepared and Copyrighted by
Title Insurance
and Trust Company
Los Angeles
Scale of English Miles
Spanish Leagues
Spanish Varas


DISEÑO
de los
Parages llamados
Sitio Grande, Coyotes,
Bolsin, Alamitos y
Serrito.
Rio de Santa Ana.
Coyotes
Bolsin
Alamitos
Serrito
N



Diseño drawn for the Nieto family dated May 1, 1834. Drawn by Abel Stearns. *Historical Society of Long Beach, RLC Collections.*

Fig. 1

RANCHO LOS CERRITOS, 9705

CHP0551

Possible Coba Adobe.

ca. 1918

The Temple Period - 1844-1866

After a challenge to their title, the heirs of Manuela Nieto decided to sell the property to John (Jonathan) Temple from Reading, Massachusetts for $3,025. The price included the five leagues of land for meat cattle, the branding iron and earmark. All of the heirs appeared before Judge Antonio Franco Coronel filing letters of proof of sale of each share for $272.75, one-half in coined money and one-half in goods at market prices.[32] The brand is recorded in the *Archivos de Fieros y Señiales* (First Book of Brands), Los Angeles County Hall of Records by Felipe de Lugo.[33]

John Temple left the East Coast as a young man to join the Pacific whaling industry and enter the Hawaiian trade. By 1827, the date of his arrival in Los Angeles, he owned his own vessel. Between 1827 and 1830 Temple became a naturalized Mexican citizen and a Roman Catholic, baptized "Juan Bautista" at the San Diego Mission.[34] On September 17, 1830, Temple, 34, married Maria Rafaela Benedicta Cota, 18, at Mission Santa Barbara.[35] Residing in Los Angeles, they became the parents of Francisca in 183 1. During this time Temple opened a merchandise store in Los Angeles in partnership with George Rice. In 1841 they were joined by. Temple's half-brother Pliny Fiske Temple who later married Antonia Marguerita Workman, daughter of William Workman of Rancho La Puente.[36]

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[32]Case No. 351, U.S. Land Commission. Guillermo Cota represented his sons Jose Maria, Leonardo, Francisco, and Benito and daughters Maria Antonia, Loreta, and Luisa; Manuel Domínguez represented his wife Gracía Cota de Domínguez and Pedro Domínguez represented his wife Maria de Jesus Cota de Domínguez.

[33]See Don E. Shannon, Juan Temple: California Caballero (MA thesis, California State University Long Beach, 1954).

[34]30 July 1827, Book II of Baptisms, Mission San Diego.

[35]A second cousin to Guillermo Cota, her parents were Francisco Cota and Maria de Jesus Olivera.

[36]Pliny was baptized into the Catholic church as Francisco and thereafter used F.P.F. Temple as his name in business. He became a partner of I. W. Hellman and William Workman in a bank venture.

On December 13, 1843, Temple completed the purchase of Rancho Los Cerritos and began to make improvements. By 1844 he had built an adobe dwelling with walls two to three feet thick. Native Americans made adobe blocks on the site while bricks used for the veranda and to line the garden beds were shipped around Cape Horn. The beams were hand-hewn redwood from the Monterey area, and the majority of rooms in the East wing contained redwood planked floors.[37] The house blended traditional Spanish/Mexican features with a Monterey style second story and second-story balcony, double-hung windows and Greek revival detailing. It was built in a U-shape with a high wall on the open side enclosing the courtyard. A two-story 80-foot long central wing was surrounded by a double wooden veranda on three sides. Two one-story wings, used originally for storage, cooking, laundry and ranch-related functions, extended 140 feet from each end. The white-washed walls supported a flat, tarred roof.[38]

.Temple planted a formal garden in the back of the ranch house and requested cherry, peach, plum, chestnut and black locust seeds from family back East. The garden, important to him for the pleasure of his family, occupied two acres enclosed by a redwood fence.[39] Water had to be carried in by buckets to sustain these non-native plants. Temple, carrying on the Hispanic rancho tradition, put about 700 head of cattle, sheep, and horses on the rest. He and his neighbor Abel Steams, owner of nearby Rancho Los Alamitos, held rodeos and barbecues. They sponsored annual horse-racing contests, establishing a race course from El Cerrito (Signal Hill)

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[37]Existing first story ceiling; Sarah Hathaway (Bixby) Smith, *Adobe Days* (Los Angeles: Jake Zeitlin, 1925 and 1931; reprinted with a foreword by Gloria Ricci Lothrop, Lincoln: University of Nebraska Press, 1987), p. 62. See also Gilbert Sanchez, Historic Structure Report, 1987, . 28.

[38]Smith, *Adobe Days,* p. 62.

[39]According to Marie Bamidge-McIntyre, "Rancho Los Cerritos Historic Site," *Pacific Horticulture (Spring* 1998), p. 1 1 "the main axial path led from the central door to the focal point--a Moorish summer house-and divided the garden in half. Secondary pathways provided access to the raised beds filled with flowering shrubs and perennials, fruit trees and grape vines,"

to the beach.[40]

In addition to Los Cerritos, Temple also owned some former mission lands of La Purísima, held properties in Los Angeles, land in Mexico, and maintained interests in a vineyard and several ranchos.[41] He operated a warehouse in San Pedro with David W. Alexander and engaged in the hide and tallow trade. Although Temple's major interest lay in his store in Los Angeles, he was also a successful rancher and eventually pastured some 15,000 cattle, 7,000 sheep and 3,000 horses. By 1852, he was listed as the wealthiest man in Los Angeles County, assessed at $108,000. He paid county taxes of $912.00.[42] In 1858, his assessed valuation in the county had dropped to $89,556 while his neighbor Abel Steams of Rancho Los Alamitos was assessed at $186,586.[43]

Having married into a local Hispanic family, Temple's loyalties during the U.S. Mexican War were mixed. With the American takeover of Los Angeles in August 1846, he was appointed alcalde of the city and was asked to take an oath of allegiance to the United States. Later, a number of pro-American residents left behind by Commodore Robert F. Stockton to guard the San Bernardino frontier were captured by *Californios* from Los Angeles and marched as prisoners to Rancho Los Cerritos.[44] They were treated more like guests by Temple, who was residing there with his wife and daughter. After the war ended in California in January 1847, Temple claimed losses through February 1847 of some $ 10,000 for damage done to his

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[40]Robinson, *Ranchos Become Cities,* p. 53-54. Abel Steams had married Arcadia Bandini, daughter of Juan Bandini of San Diego, and purchased Los AJamitos and its livestock in 1842. According to Robinson, Temple pastured as many as 15,000 cattle, 7,000 sheep and 3,000 horses.

[41]Hall of Records, Los Angeles County, Book A, 1825-1850, Translation, Part I. Reference Manual, p, 10.

[42]T'he *Los Angeles Star* published a list of forty-nine persons in the county who paid taxes of $100 or more. Temple was the highes, leading José Sepulveda, $723; Abel Steams $719 and Antonio Maria Lugo $676. See Iris Highie Wilson, *William Wolfskilll: Frontier Trapper to California Ranchero.* (Glendale: Arthur H. Clark, 1965), p. 155.

[43]*The Southern Vineyard,* September 18, 1858.

[44]Most of these were of American origin, although some were naturalized Mexican citizens.

property,[45] although most of the fighting had taken place on Domfnguez property. Temple received no compensation.

Signed on February 2, 1848, the Treaty of Guadalupe Hidalgo ended the war, divested Mexico of approximately fifty percent of its land in exchange for $15 million, and pron-Lised perpetual peace between the United States and Mexico.[46] Article V set the boundary line between the two countries,[47] and Article VIII guaranteed the Mexican residents of California and other conquered territories the right to become U.S. citizens and to retain title to their land. Many of these people became citizens but not all obtained clear title. In fact, one of the major problems of the early American period was the failure of many Mexicans to successfully gain title to their rancho holdings. Claimants, including members of the Verdugo, Coronel, Lugo, Peralta and Estudillo families, fought court battles over many years to achieve clear title only to lose their lands in the end because of debts incurred and mortgages taken out to pay taxes and legal expenses.[48]

In California statehood was quickly achieved. Several factors hastened the acceptance by the Thirty-First Congress of the thirty-first state, the one that broke the long existing sectional balance between North and South, favoring the North with admission of California as a free state. The immense population increase resulting from the Gold Rush in 1849 allowed the newcomers

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[45]J. Temple to Abraham Temple, 6 February 1847, Worden Papers, The Huntington Library.

[46]Ramon Eduardo Ruiz reflects bitterly in *The Mexican War: Was it Manifest Destiny?* (New York: Holt Rhinehart and Winston, 1963), p. 1 that "The war is one of the tragedies of history. Unlike the Americans who have relegated the conflict to the past, Mexicans have not forgotten. Mexico emerged from the war bereft of half of its territory, a beaten, discouraged, and divided people."

[47]See William H. Emory, *Report on the United States and Mexican Boundary Survey,* Vol. I (Washington, DC.: 34th Congress, lst Session, Senate Executive Document No. 108); and *Drawing the Borderline: Artist-Explorers of the U.S. -Mexico Boundary Survey* (Albuquerque: The Albuquerque Museum, 1996).

[48]See Paul W. Gates, "California's Embattled Settlers," *California Historical Society Quarterly,* XLI (June 1962), 99-130 and "The California Land Act of 1851," *California Historical Quarterly,* L (December 197 1), 395-430. See also Leonard Pitt, *The Decline of the Californios: A Social History of the Spanish Speaking Californians, 1846-1890* (Berkeley and Los Angeles: University of California Press, 1966).

to ask for inclusion as a full partner in the Union. After mollifying the southern states by promising that the new territories would be organized without the prohibition of slavery, California was admitted to statehood on September 9, 1850.

With the arrival of so many newcomers, life in California changed forever. Southern California was affected less by gold fever, but food prices soared as ranchers drove their cattle northward. In September 1848, the Temple's daughter Francisca married Gregorio de Ajuria of Spain. They spent their honeymoon at Rancho Los Cerritos, which according to the census of 1850, listed 36 residents including 22 Indians and eight children under 12. The ranch manager, José Simon Roco, 33 years old, was from Spain, as was Manuel Fojo, a 45 year-old laborer. One worker, Tupjuria, 35, was listed from Hawaii.[49] Because of California's strict land law of 1851 introduced into Congress by Senator William Gwin, John Temple was forced to prove his title to Rancho Los Cerritos in 1852. This meant gathering together all of the documents used by the Nieto clan to divide up their father's large ranch in 1834, translate these into English, and present the claim in San Francisco. Temple's claim was confirmed by Commissioners Heiland Hall and Harry Thornton on 11 April 1853, but Pacificus Ord, U.S. Attorney for the Southern District of California, petitioned for invalidation of the claim.[50] Temple's title was again determined to be valid by Judge I. L. K. Osier in 1855-56 and a second attempt by Ord to invalidate the claim failed.[51]

During the 1850s, the Temples prospered. John had interests in several profitable trading

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[49] *Census of the City and County of Los Angeles, California for the Year 1850.* Edited by Maurice H. Newmark and Marco R. Newmark (Los Angeles: The Times-Mirror Press, 1929), pp. 79-80. Some of those listed as laborers from California had Basque surnames such as Lasa and Lisalde and possibly Ruiz.

[50] Ironically, Temple loaned the City of Los Angeles $3,000 to pay Ord's brother, Lt. E.O.C. Ord for the first survey and map of the city in 1849.

[51] Case 351, U. S. Land Commission. The Plat of Rancho Los Cerritos containing 27,054.36 acres was surveyed by Henry Hancock according to instructions from the U.S. Surveyor General and was finally confirmed to Juan Temple, deceased, in July 1866. See File #70, Titulo No. 27, Spanish Archives, Rec. *Book of Patents,* L.A.. County, Book II, 7, December 1867.

ships sailing between Acapulco and San Francisco and took an active part in the political, commercial and social affairs of the Los Angeles area. In 1859 John built the first office building in the growing town, a combination market, theater and city hall.[52] He planted shade trees and put in a sidewalk outside his store. Because of John's success, the Temple family enjoyed vacations in France. When daughter Francisca and Gregorio de Ajuria moved to Mexico, Temple leased the Mexico City mint and coined money for Mexico under the firm of Belange and Temple until 1864.[53] Although this operation was profitable, his fortunes in California began to fall.

The 1860s brought hard times to ranchers in the southern part of the state when the weather alternated between severe floods and droughts. Temple continued to make improvements at his ranch, putting in some irrigation devices and drilling a well.[54] Nevertheless, over-extended business dealings, added to a drop in cattle prices, led Temple to sell Rancho Los Cerritos to the northern California sheep ranching firm of Flint, Bixby and Company in 1866 for "twenty thousand dollars in gold, or about seventy-five cents an acre for the twenty-seven thousand acres, without allowing anything for the fine adobe hacienda with its Italian garden.[55] John Temple, who had wanted to settle his affairs and travel to Paris, died on 31 May 1866. His wife Rafaela Cota went alone to the French capital to spend the remainder of her life with her daughter and grandchildren.

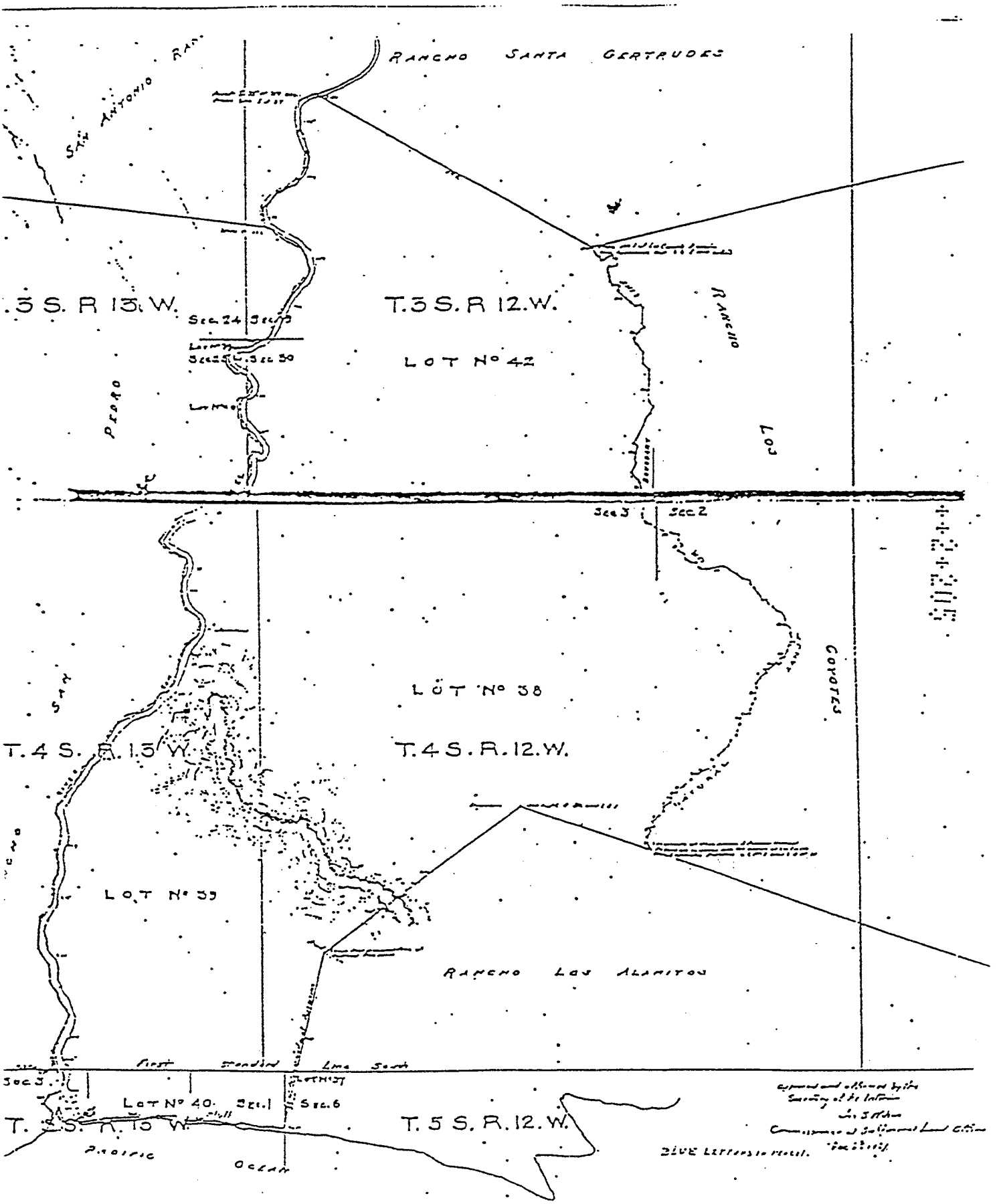
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[52]Harris Newmark, *My Sixty Years in Southern California* (New York: Houghton Mifflin Co., 1930), p. 240.

[53]Gregorio and Francisa moved to Paris, France in 1858 as a result of Mexico's civil conflict. The lease was renewed and Belange and Temple continued to operate the mint until 1893.

[54]Miguel Murillo, part Cahuilla Indian, worked for Temple on the ranch, learning to break horses at age 14. He stayed on to work for Jotham Bixby and lived in the house until about 1920.

[55]Sarah (Bixby) Smith, *Adobe Days,* p. 55.



vey dated Dec. 6, 1867 confirming Flint, Bixby & Co.'s purchase of Rancho Los Cerritos. *RLC Collections.*

Fig. 2

shearings twice a year. John kept a careful record of his transactions in a ledger labeled "the Wilmington Ledger." In addition to complete details regarding the sheep industry, the ledger also listed John's personal expenses, including even the ring he bought for his marriage to "Susie."

The Bixby/Hathaway clan in California continued to grow as John and Susan gave birth to son Fred in 1875 and daughter Susanna in 1880. The Reverend George Hathaway, after the death of his second wife, had also moved in June 1877 from Maine to Rancho Los Cerritos with his daughter Martha. Other ranch residents at this time included Ying, the Chinese head cook, and Fan, his assistant; Juan Ignacio, ranch employee, and his wife; Juan Canedo, a *vaquero* who had worked for Temple; Canedo's wife and family; assistants José, Romulo and Miguel, of mixed Spanish and Indian descent; Jim Rainey, teamster, and several other persons who stayed for various periods of time.[78] The Cerritos school was built about this time and John Bixby sub-leased several thousand acres of neighboring Rancho Los Alamitos. He and Susan moved there in 1878 with John taking over the management of some fifteen to eighteen flocks of sheep under the care of Basque sheep herders.[79]

All was not well, however, for the sheep industry in California. An 1872 drought caused a temporary price collapse, but the industry recovered until it reached a high point of seven million head in 1874. Jotham Bixby purchased 1,500 acres of Rancho Palos Verdes in that year.[80] A more serious drought in 1877 caused sheep prices to fall to 25 cents per head and baby lambs were slaughtered to protect the remaining herds. Much land was diverted to orchards,

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[78] Others included Parlin, from Maine, Roy, an Englishman, John, Portuguese, Henry and Charlie, Americans, and John O'Connor, Irish. See Smith, *Adobe Days* and the *Long Beach Daily Telegram,* January 8, 1913 and February 22, 1916.

[79] Rancho Los Alamitos had passed from Abel Steams into the hands of Michael Reese. After Reese died, John leased the property from the estate and moved into the old adobe built by Nieto in 1806 and added onto by Steams.

[80] Jotham acquired 17,086.91 acres at the partition of this ranch in 1882. See Mary Eva Thacker, History of Los Palos Verdes Ranch, 1542-1923 (University of Southern California MA thesis, 1923). He had acquired another portion of the Rancho Palos Verdes for $2,000.

farms and dairies. The Jotham Bixby family moved to Los Angeles in 1881 but continued to operate Rancho Los Cerritos for about five more years. Nephew George Bigelow Bixby, along with nephew Abraham Lincoln Lovett, took over management responsibilities and lived there for several years in the mid 1880s.[81] Jotham's brother Marcellus Bixby also ran a dairy of fifty cows on the ranch, making about fifty pounds of butter per week.[82] Also in 1881, John Bixby, J. Bixby & Company and 1. W. Hellman, a Los Angeles banker, purchased Rancho Los Alamitos.

Much had changed in the area surrounding Rancho Los Cer-ritos in just a few years. The Los Angeles and San Pedro Railroad connected the port of Wilmington to a growing urban center in 1869 and, on a larger scale, the transcontinental railroad connected west to east in that same year. The Southern Pacific brought that line to Los Angeles in 1876 and began an era of population growth that became known as the "Boom of the Eighties." The numbers arriving increased considerably when entry of the Santa Fe Railroad into Los Angeles in 1885 brought competitive rail rates (as low as $1.00 from Kansas to California at one point) and heavy land promotion. Thousands of eastemers and Midwesterners came West to enjoy the "mild and healthful climate" and take advantage of properties offered near the mountains or the sea. The University of Southern California opened its doors in 1880 and by 1890 the population of Los Angeles had jumped from 10,000 to 50,000.[83]

Rancho Los Cerritos had an ample water supply since, by 1880, ten artesian wells had been sunk on its grounds. Archibald Borden and four sons came to Los Cerritos to raise wheat

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[81] Abraham's father William Lovett an attorney and politician, was married to Nancy Dinsmore Bixby, sister of Lewellyn and Jotham.

[82] The U.S. Census of Agriculture and Industry for 1880 lists Marcellus Bixby as producing 2,600 lbs. of butter in 1879; Thompson & *West, History of Los Angeles County* (Oakland: Thompson & West, 1880), p. 148 reports 200 pounds of butter per week. Flint, Bixby and Co. had sold 100 acres of land near the east bank of the San Gabriel River to Marcellus on July 25, 1871. Marcellus built a house there and sunk an artesian well. He had two sons, Edward and Herbert.

[83] See Glenn S. Dunike, *The Boom of the Eighties in Southern California* (San Marino: The Huntington Library, 1944).

and barley as sharecroppers. They constructed a shack near what is now Pine Avenue and First Street in Long Beach and used it when they had to work in the fields. Because a shepherd for the Bixbys also occupied the shack when the sheep were turned out for grazing, it became known as the "sheepherder's hut." [84] William Willmore, originally from England, then leased 4,000 acres of Rancho Los Cerritos in 1881 with an option to buy in three years. Willmore had been introduced to Jotham Bixby by John Temple, nephew of Bixby's predecessor John (Juan) Temple and a director of the California Immigrant Union, and received CIU backing for his project. He began to lay out Willmore City and establish the "American Colony" complete with artesian wells, 5 to 40 acre farms, town lots and even a college or university. [85] Willmore's plan was to attract farmers and dairymen. In the meantime, Charles Healey and his family resided at Rancho Los Cerritos while Healey surveyed land for the colony.[86] Charles Edward Mitchell also moved on to Los Cerritos about this time and took charge of a cheese factory in an area three miles east of the ranch house. Mitchell built complete dairy buildings and managed the dairy for some twenty years.

Despite an aggressive advertising campaign, Willmore lost his option on the ranch lands in 1884 and the contract was picked up by the real estate firm of Pomeroy and Mills who quickly formed the Long Beach Land & Water Co.[87] With the Boom of the Eighties in full swing, lands

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[84] Interview with Mrs. Matilda Borden, *Long Beach Sun,* March 23, 1924, quoted in Loretta Berner, "A Step Back in Time," Historical Society of Long Beach *Journal,* 1989-90.

[85] The CIU founded the "Indiana Colony" (later Pasadena) and the "Riverside Colony." See Brokate, The Bixby Family and Changes in Land Use, n. 127.

[86] In 1886 Jotham Bixby sold property north of the ranch house and in 1891 the land became the town of Clearwater. Later, a small community called South Clearwater was established and changed its name to Hynes to attract the railroad. Clearwater and Hynes later joined to become the city of Paramount in 1949. Jotham Bixby also sold land to the Cerritos Colony and the Wilmington Colony. See Brokate, The Bixby Family and Changes in Land Use, p. 19.

[87] Larry L. Meyer and Patricia L. Kalayjian, *Long Beach: Fortune's Harbor* (Tulsa: Continental Heritage Press, 1983), pp. 37-39. Willmore was reimbursed $8,000 for his water system and, ironically, many of the directors of the new company were the same men Willmore had dealt with during the previous three years.

sales improved and the city that they established was renamed Long Beach. It was incorporated on February 10, 1888 as a city of the sixth class. The ninth ordinance passed by city trustees in April prohibited the establishment of saloons and gambling houses.[88]

In 1885, shortly after Willmore's plan failed, Jotham and Margaret Bixby returned to what had become Long Beach and built a house at the comer of Magnolia and Ocean, entering into local affairs. Their youngest daughter Fanny, born in 1879 and the only one of four daughters to live beyond the age of 22, lived with the family in their attractive Victorian home.[89] Jotham, who had also sold 6,000 acres of the northern portion of Rancho Los Cerritos to the California Cooperative Colony, had turned his interests away from ranching to subdividing. John Bixby, who had moved with his family to Rancho Los Alamitos, died suddenly of peritonitis at the age of 39 in 1887. For this reason, the Alamitos Land Company was incorporated with 1. W. Hellman as president and Lewellyn Bixby[90] as vice president. Alamitos Townsite had been laid out by John just before his death so the other partners followed John's plans for the community just east of the young city of Long Beach. In 1891, the final decree of partition of the J. W. Bixby Company estate gave one-third--the northern portion of Los Alamitos--to J. Bixby & Co. with Jotham Bixby thus receiving one-half of this third. 1. W. Hellman received one-third of the property and Susan Hathaway Bixby, John's widow, received the central portion of Los Alamitos for herself and her two children, Fred and Susanna. She leased out the property and moved to

[88]Reportedly on the recommendation of Mrs. Jotham Bixby, Willmore included in his deeds a reversionary clause that stated if liquor were ever sold on the property, the land immediately reverted to its previous owner. Only deeds reserved as hotel sites were exempt. The no Equor policy became quite an issue and began to be relaxed after 1890. Nevertheless, several more controversies over the sale of liquor ensued.

[89]Fanny, who marched to a different drununer, attended Wellesley College for three years and became vitally interested in social service. Sensitive, strong-willed and compassionate, she settled for awhile in San Francisco and worked among the city's poor in a nurse's settlement house. She returned to Long Beach in 1908 and served as president of the Political Equality League until women gained the right to vote. She joined the Socialist Party and became a pacifist in World War 1. She manied fellow socialist W. Carl Spencer in 1918, moving with him to Costa Mesa (then Harper). Always true to her views, she became a writer of consequence but donated to many causes. She died of cancer in March 1931 at the age of 51.

[90]Lewellyn's second wife Mary died in 1882; a fifth Hathaway sister, Martha, moved in with the family and cared for the children.

Berkeley with her children who attended school there.[91]

Sheep operations at Rancho Los Cerritos had decreased considerably during the late 1880s and had essentially ceased by the early 1890s. Gradually the property at both Cerritos and Alandtos was subdivided for sale or fenced in for the dairying operations that characterized the next few decades. These were overseen by Jotham and son George H. Bixby. The Alamitos Land Company retained acreage on and to the east of Signal Hill, engaged in farming, acquired new ranch properties in the Imperial and San Joaquin valleys, and developed commercial projects.

[91] When Susan died in 1906, Fred, who had married Florence (Polly) Green of Berkeley, inherited the house and bams of Rancho Los Alamitos and moved his family into the adobe house. Fred's sister-in-law, Leslie Thayer Green, married Howard Huntington, son of Henry E. Huntington of San Marino.

THE AMERICAN COLONY.

This new colony for Los Angeles county is now forming to locate on the

Cerritos Ranch,

Fronting on San Pedro Bay. Parties looking for a desirable location to make homes should see these lands before purchasing elsewhere. Parties can go and see the Colony tract and return the same day from Los Angeles. For further particulars apply to or send stamp for Colony map, prospectus, etc., to

W. E. WILLMORE,

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SAN FRANCISCO TO PANAMA.

1st CABIN Table Seat No.....

Mr & Mrs Risley

Stateroom..... Berth..... Date.....

.....Purser.

Good for this Trip only. To be shown and returned when called for.



Benjamin Flint



Lewellyn Bixby





Original Flint Bixby & Co.
date stamp

Jotham Bixby

Margaret Hathaway

John Bixby

Susan Hathaway

ca. 1872
CHP0241
RANCHO LOS CERRITOS, 9705
courtesy of the Rancho Los Cerritos Foundation

RANCHO LOS CERRITOS, 9705

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RANCHO LOS CERRITOS, 9705

Courtesy of the Rancho Los Cerritos Foundation

RANCHO LOS CERRITOS, 9705

oto courtesy of the Rancho Los Cerritos Foundation.

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The Tenant Period - 1890 - 1929

The years from the late 1890s to the end of the 1920s became a period of transition for Rancho Los Cerritos. A number of different residents occupied the ranch as the activities varied and boundaries were redrawn. The most significant change was a decline in the fortunes of Flint, Bixby & Co. The company had diversified as California grew in population, and their funds were placed in several different ventures, some of which were more profitable than others. Their production of beet sugar ended in 1880 because of high processing costs and the collapse of sugar prices caused by cane sugar imports from Hawaii. The company's operation of the Coast Line Stage Co., which at its height consisted of over 250 horses, 22 stage stations and 23 vehicles, serviced an area from Los Angeles to San Jose. Even though the operation showed some success, as the railroad expanded south and north from Los Angeles, stage lines contracted and consequently lost money.[92]

Flint, Bixby & Co.'s indebtedness increased and upon Lewellyn's death in 1896, an effort to dissolve the company began. Sale of a large portion of Los Cerritos land made in 1897 to William A. Clark, a successful miner from Montana, helped scale down the debt. Clark's name is recalled by Clark Avenue in Long Beach.[93] By 1899, through a series of complex negotiations, Lewellyn's estate was settled and Flint, Bixby & Co., which had begun in California with 2,400 sheep in 1853, was dissolved. Bixby Land Co., however, "was incorporated June 13, 1896, in a transaction related to Clark's incorporation of the Los Alamitos Sugar Company."[94] This was

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[92] Dudley, *The Bixby Family Guide,* pp. 32-33.

[93] Ibid., p. 34.

[94] Ibid., pp. 39-40. Alamitos Land Co. was incorporated on January 27, 1888, and took over about 4700 acres of the southwestern portion of Los Alamitos for development. It retained land at Signal Hill where oil was discovered in 1921. Bixby Land Co. today is owned primarily by the descendants of Lewellyn and Jotham Bixby. See also Kaye Briegel, Bixby Land Company 1896-1996: A Centennial History (Long Beach: Bixby Land company, 1996).

followed by the incorporation of Palos Verdes Company on June 17, 1897, a company consisting of Lewellyn's estate (1/4), Thomas Flint (1/4) and Jotham Bixby (1/2). It was formed specifically to assume the assets and liabilities of the J. Bixby & Co. partnership. The significant assets included land at Palos Verdes plus the remaining Los Cerritos property held by J. Bixby & Co. One thousand acres near present-day Lakewood was the land involved in the Clark transaction. The primary focus of the Palos Verdes Company was the operation of a cattle ranch until 1913.[95]

From 1898 to 1906, dairyman William Boyle and his son Johnny lived at Rancho Los Cerritos with 150 cows and 5 to 6 milkers including John A. Wilson in 1903.[96] Others who lived and worked on the ranch during the late 1890s, and around the turn of the century included Mr. Spears, a groundskeeper and his wife Alice; and Bert Carter who married Clorinda Bustamante. In 1906, Charles McWilliams, E. H. Skinner, W. E. James and F. E. Woodruff purchased 1,440 acres for $250,000. Bellflower was also founded.[97] That same year the acreage around the Los Cerritos adobe, which had been operated as a dairy until that time, was subdivided for the Cerritos tract. The remainder of the acreage not leased to dairymen and farmers raising gain and lima beans was planted with barley and alfalfa under the management of the Jotham Bixby Company (founded 1902).[98]

By 1910, Rancho Los Cerritos was no longer a relatively isolated rural area. The Pacific Electric Railway, built by Henry E. Huntington to connect the city of Los Angeles with outlying suburbs, stopped southwest of the ranch house before Los Cerritos, continuing on to Long Beach,

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[95]A large transfer of 16,000 acres to an eastern syndicate occurred in 1913 and led to the development of Palos Verdes Estates. The company was dissolved in 1927.

[96]Loretta Berner, *Long Beach Review*, September 1985; See also Loretta Berner, *Rancho Los Cerritos* (Ramona, CA: Acoma Books, 1975).

[97]Historical Volume & Reference Works, vol. IV.

[98]Berner, *Long Beach Review*.

Signal Hill, and Orange County.[99] From 1908 to 1910 the Thomas Ricketts family lived at Los Cerritos with their four children. Daughter Mary was born there in 1908. They were followed by the Rosales family from 1910 to 1916, whose daughter Jenny was born at the ranch in 1910. Her sister Cecilia went to school with Loretta Berner, who later became a Long Beach historian. Ramona Lopez ran a boarding house upstairs from 1910 to perhaps 1919. Also living there were Bill and Mary Lerg with three children. Daughter Ethel was born at Rancho Los Cerritos in 1911 and the family moved to Los Angeles in 1913. In 1915, Jotham and George H. repaired the adobe with new shingles and applied a fresh coat of plaster to the walls.[100] Sadly, Jotham Bixby died at his home in Long Beach in 1917 so little more was done to the ranch house over the next decade.[101]

The Coronado family lived at Cerritos from 1920 to 1926. Mrs. Coronado, born Juliana Murillo and baptised April 11, 1885, was the daughter of Agapita Mireles and Lázaro Murillo, a nephew of early resident Miguel Murillo.[102] Daughter Juanita was born at Rancho Los Cerritos in 1920. Other children included Virginia (Babcock), Concepción (Liera), Eleanor (White). Mary and Frank.[103] Manuel Liera moved to the ranch in 1921 to begin work at the new Virginia Country Club adjacent to Rancho Los Cerritos. He married Concepción Coronado at St. Anthony's Catholic Church on October 26, 1924, and their wedding reception was held at the ranch in the old master bedroom of the adobe. Guests included several members of old

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[99]See William B. Fredericks, *Henry E. Huntington and the Creation of Southern California* (Columbus: Ohio State University Press, 1991), pp. 154-56. Long Beach had grown from 564 in 1890 to 17,809 by 1910.

[100]Jothain and George Bixby contemplated restoring the adobe completely at this time but did not carry out their plans.

[101]George H., who succeeded his father as president of Bixby Land Co. in 1917, died in 1922.

[102]See note 52.

[103]Frank Coronado remembered visiting the ranch for a barbeque in 1914 when he was four years old.

California families such as Domínguez and Figueroa. Manuel and Concepción's daughter Rosie was born there in April 1926.[104]

Immediately after the turn of the century, lot sales were brisk in the Long Beach townsite area. Many residential lots were sold by whole blocks and later resubdivided by the new owners. By 1920, the southerly slope of Signal Hill contained a large number of truck gardens and the upper slopes of the hill were forming the prime residential sites because of their magnificent view of the Ocean and Catalina Island. These ideally located sites were abruptly transformed on June 23, 1921, when oil was discovered by Shell Oil Company in Alamitos Well No. 1 at Temple and Hill streets. Alamitos Land Company had leased some 100 acres to Shell in January 1921 and this discovery touched off an oil boom
that forever changed the character of Signal Hill.[105] At this same time, on June 15, 1923, the voters of Long Beach overwhelmingly approved a bond issue for $900,000 to purchase 257 acres from the Alamitos Land Company for Recreation Park. The Virginia Country Club, which had previously leased the park area property since its founding in 1909 (with initiation fees of $25.00 and dues of $2.50 monthly), moved to its present location nearly surrounding the Rancho Los Cerritos Adobe.[106] It had purchased the land east of the rancho in 1919 and began construction of the golf course, which opened in 1921.[107] Maintenance of the adobe and surrounding gardens was generally neglected during the tenant period. Those living in the ranch house removed ornamental plants to make room for row crops, livestock roamed in the garden area, and "the

[104] Berner, *Long Beach Review*.

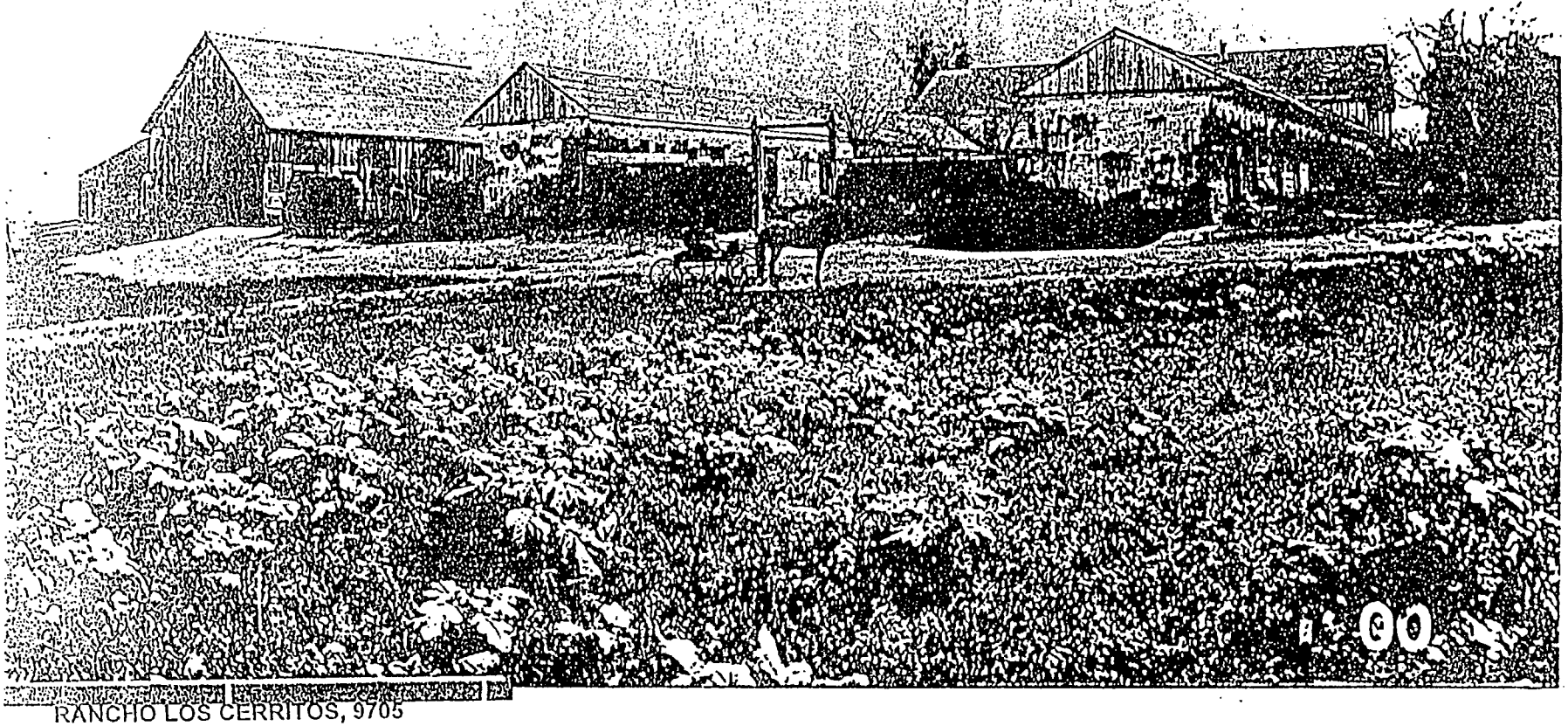
[105] Meyer and Kalayjian, *Long Beach*, p. 179. Alamitos No. 1 is still producing oil.

[106] Ibid. See also Walter Case, *History of Long Beach and Vicinity* (Chicago: S. J. Clarke Publishing Company, 1927).

[107] Manuel Liera worked at the club until 1935.

glory of Temple's garden had faded..."[108]

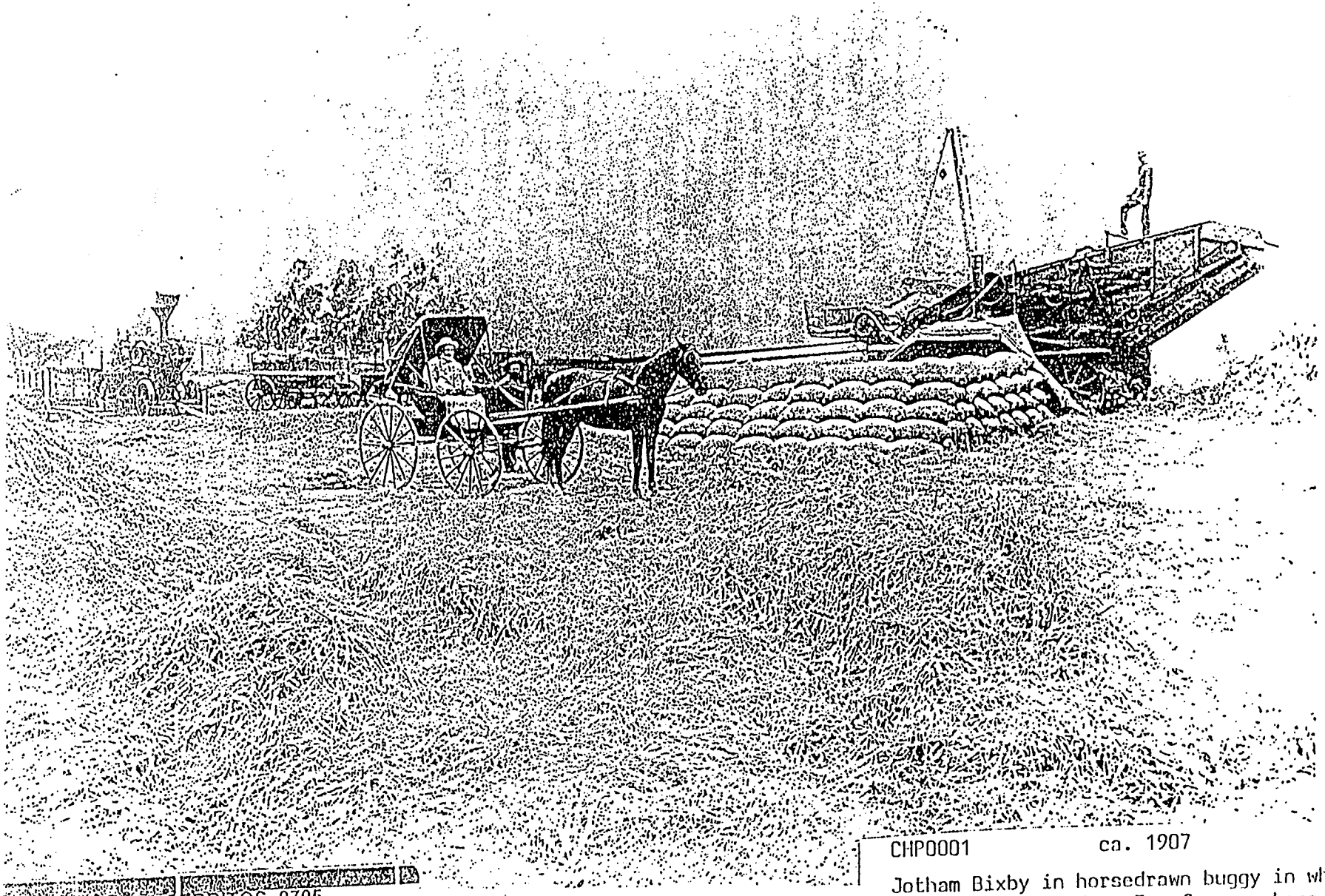
[108]Barnidge-McIntyre, "Rancho Los Cerritos," p. 12.



RANCHO LOS CERRITOS, 9705

courtesy of the cho Los Cerritos Foundation

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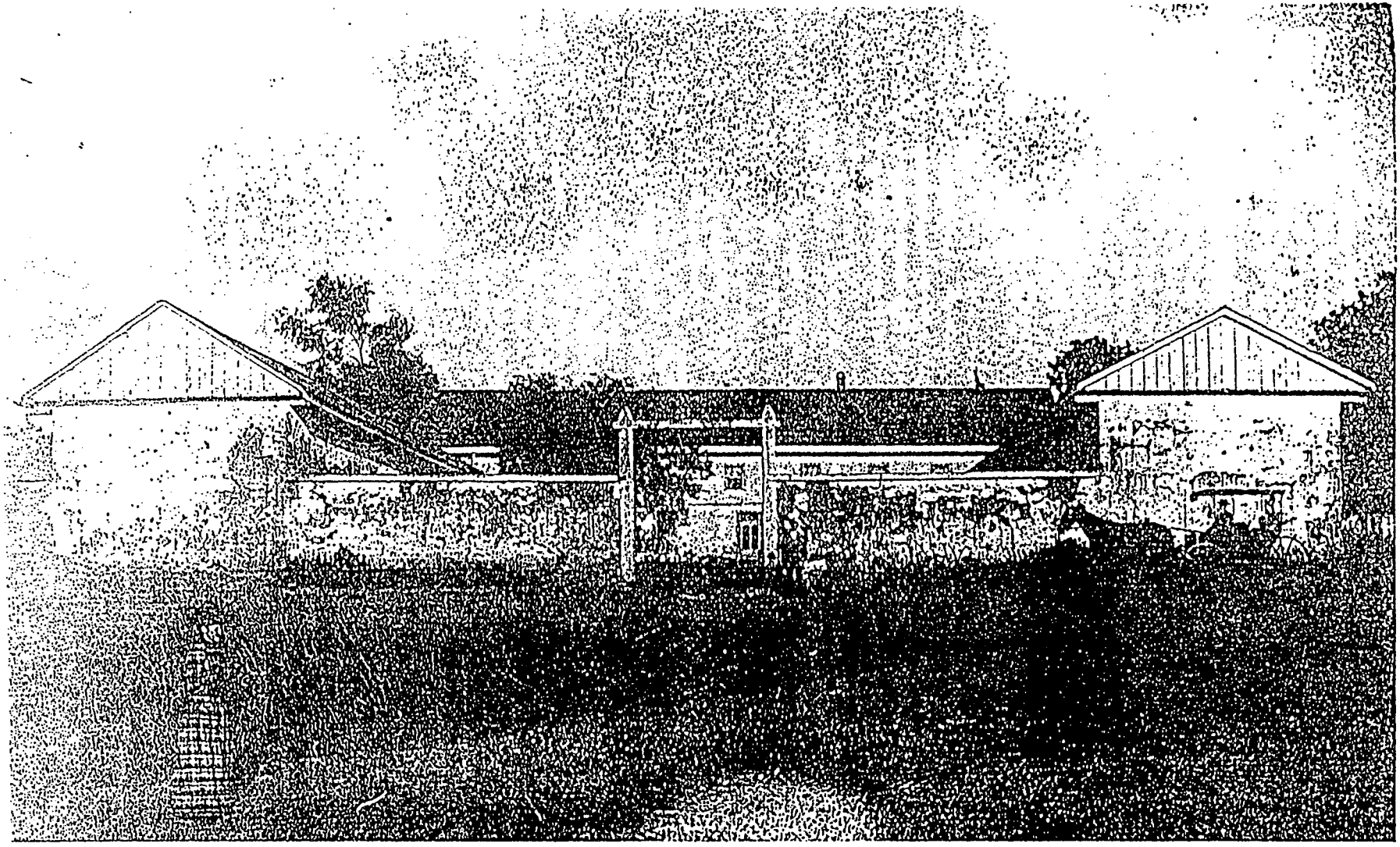
CHP0001 ca. 1907

Jotham Bixby in horsedrawn buggy in wheat(?) field on RLC lands. Two farm workers, threshing machine, wagons, and other farm machinery visible.

RANCHO LOS CERRITOS, 9705

courtesy of the Rancho Los Cerritos Foundation

Attachment 3, Page 410 of 1210
Attachment 1, Page 415 of 1215
12/8/2020 Board Meeting
12/9/2025 Board Meeting
7-5
7-6



RANCHO LOS CERRITOS, 9705

courtesy of the Rancho Los Cerritos Foundation

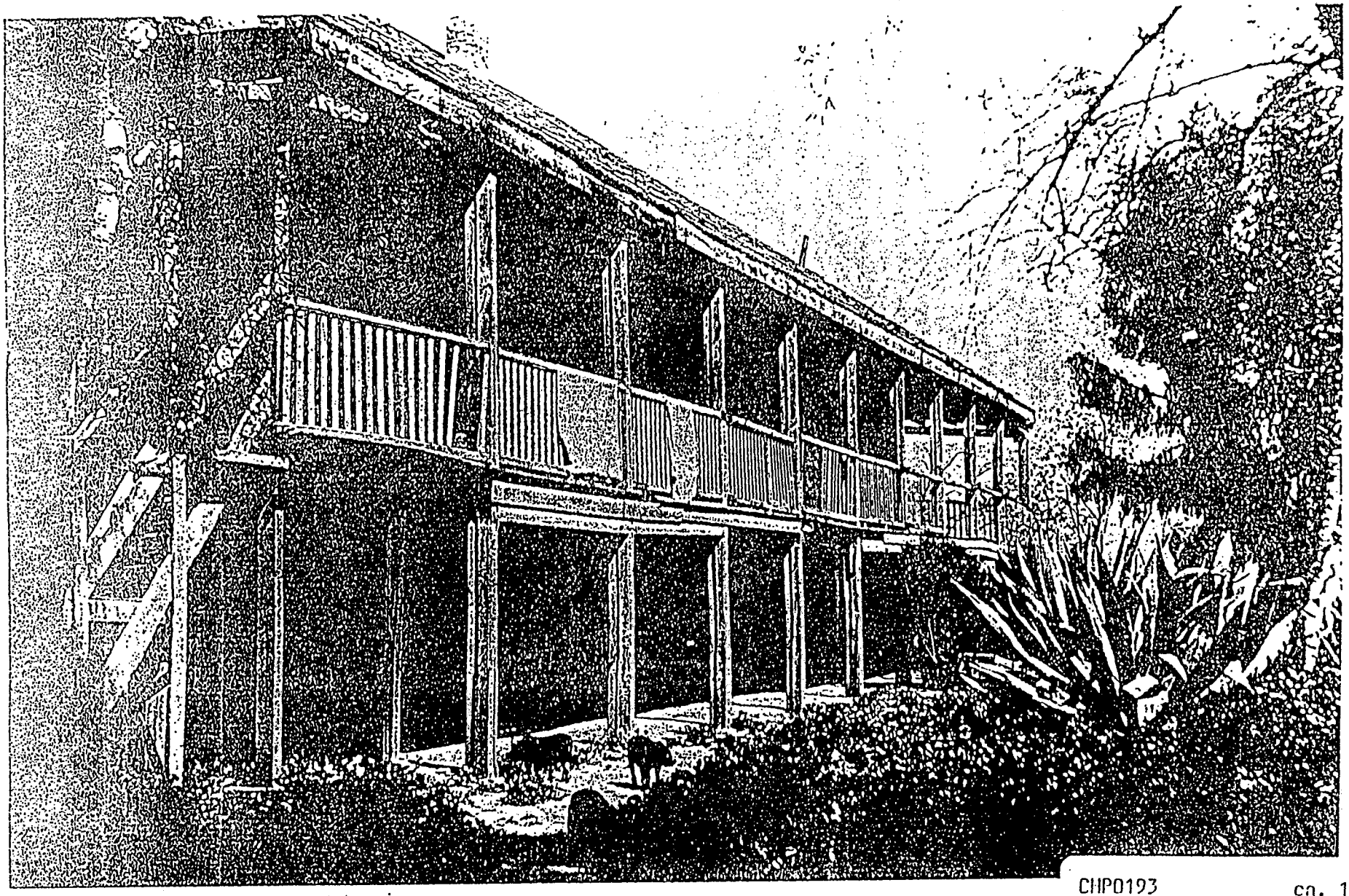
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RANCHO LOS CERRITOS, 9705

Photo courtesy of the Rancho Los Cerritos Foundation

CHP0007 ca. 1913



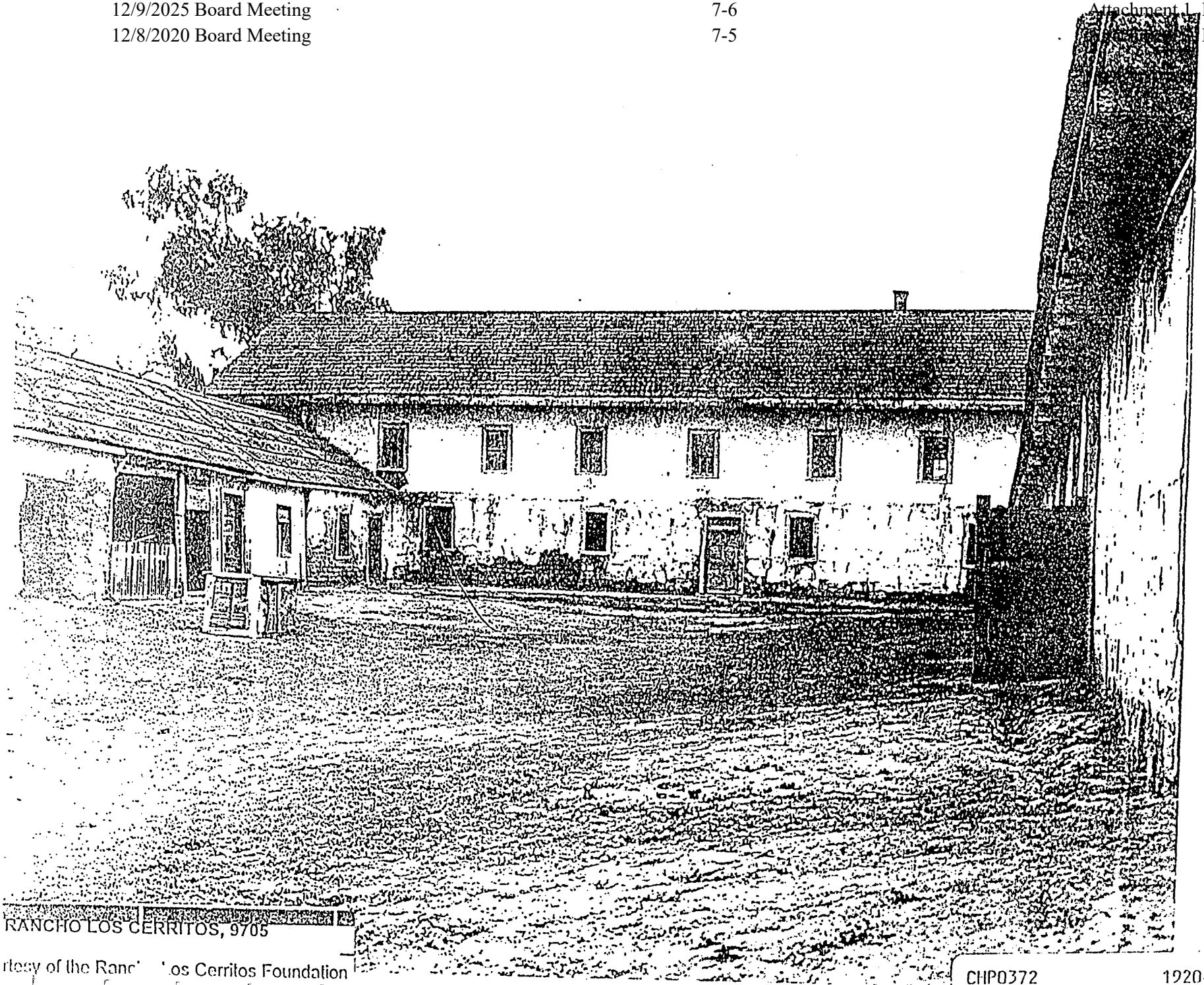
CHP0193 ca. 1920's

RLC adobe, veranda and east end of house showing stairs to 2nd flr.; garden w/ lawn

RANCHO LOS CERRITOS, 9705

courtesy of the Rancho Los Cerritos Foundation

12/9/2025 Board Meeting
12/8/2020 Board Meeting
Attachment 3, Page 414 of 1210
Attachment 1, Page 410 of 1215

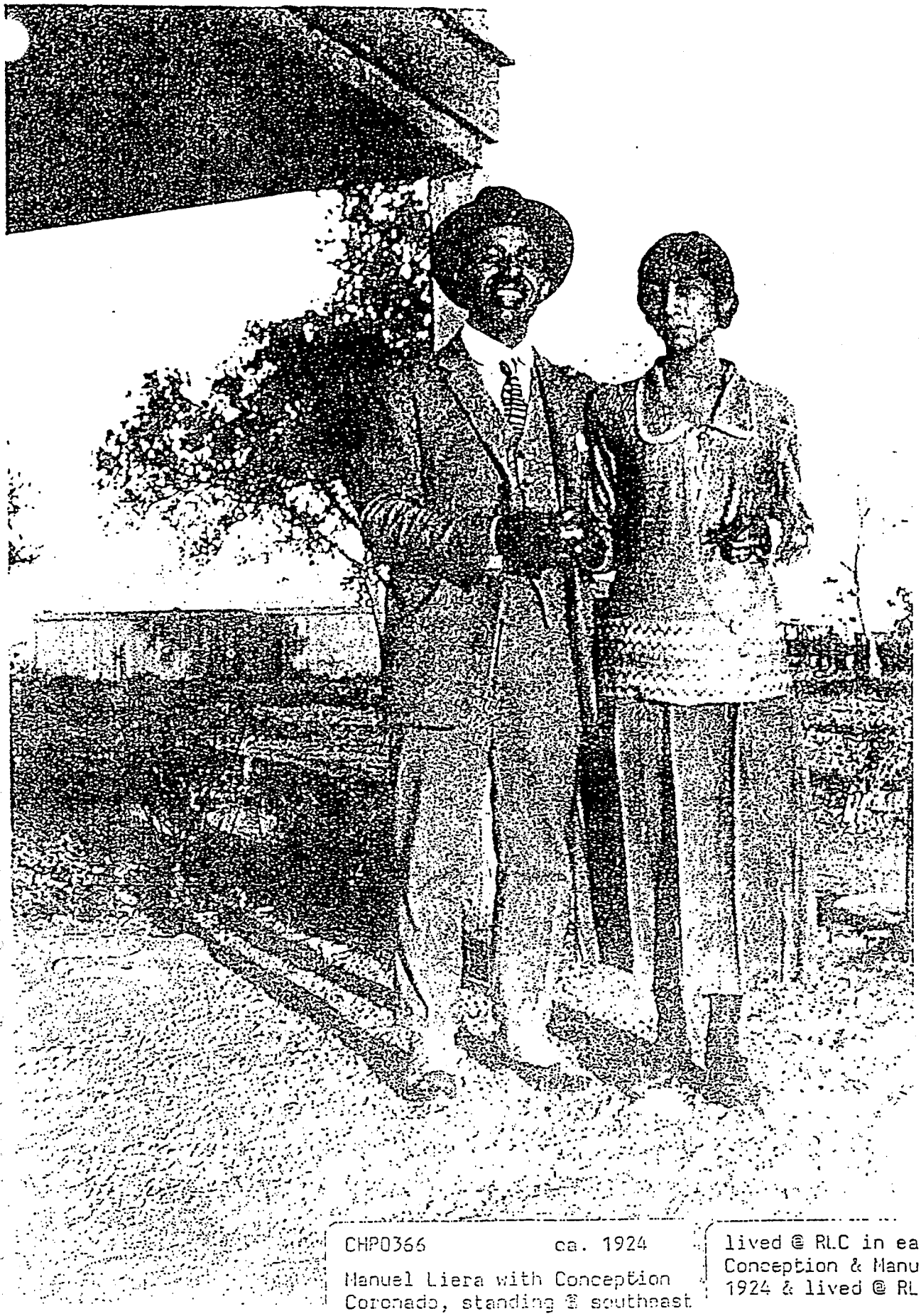


RANCHO LOS CERRITOS, 9705

rtesy of the Ranc' 'os Cerritos Foundation

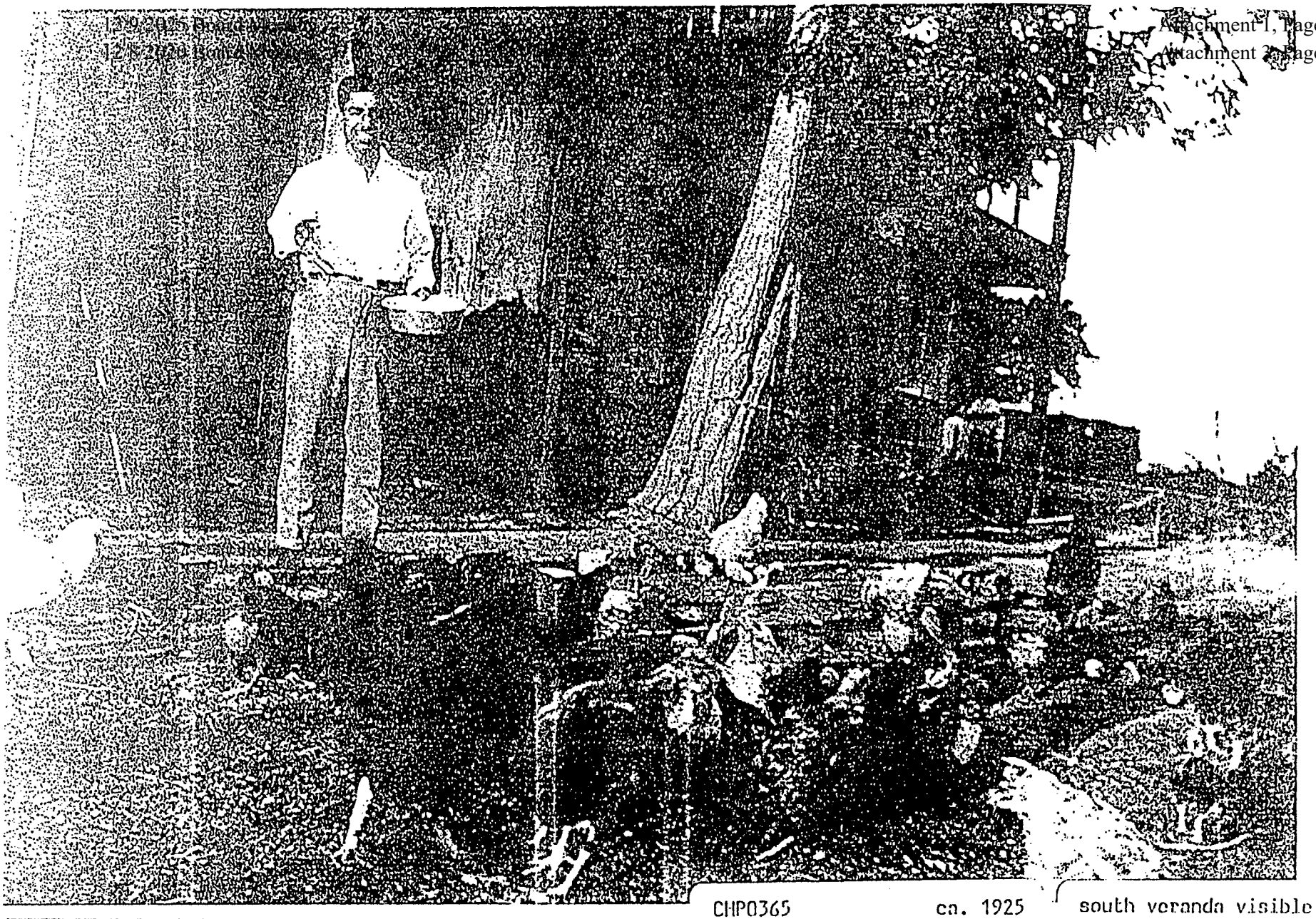
CHP0372

1920-1929
(poss 1921)



CHP0366 ca. 1924

Manuel Liera with Conception Coronado, standing @ southeast corner of RLC adobe. Coronados lived @ RLC in early 1920s; Conception & Manuel married in 1924 & lived @ RLC 1924-1926.

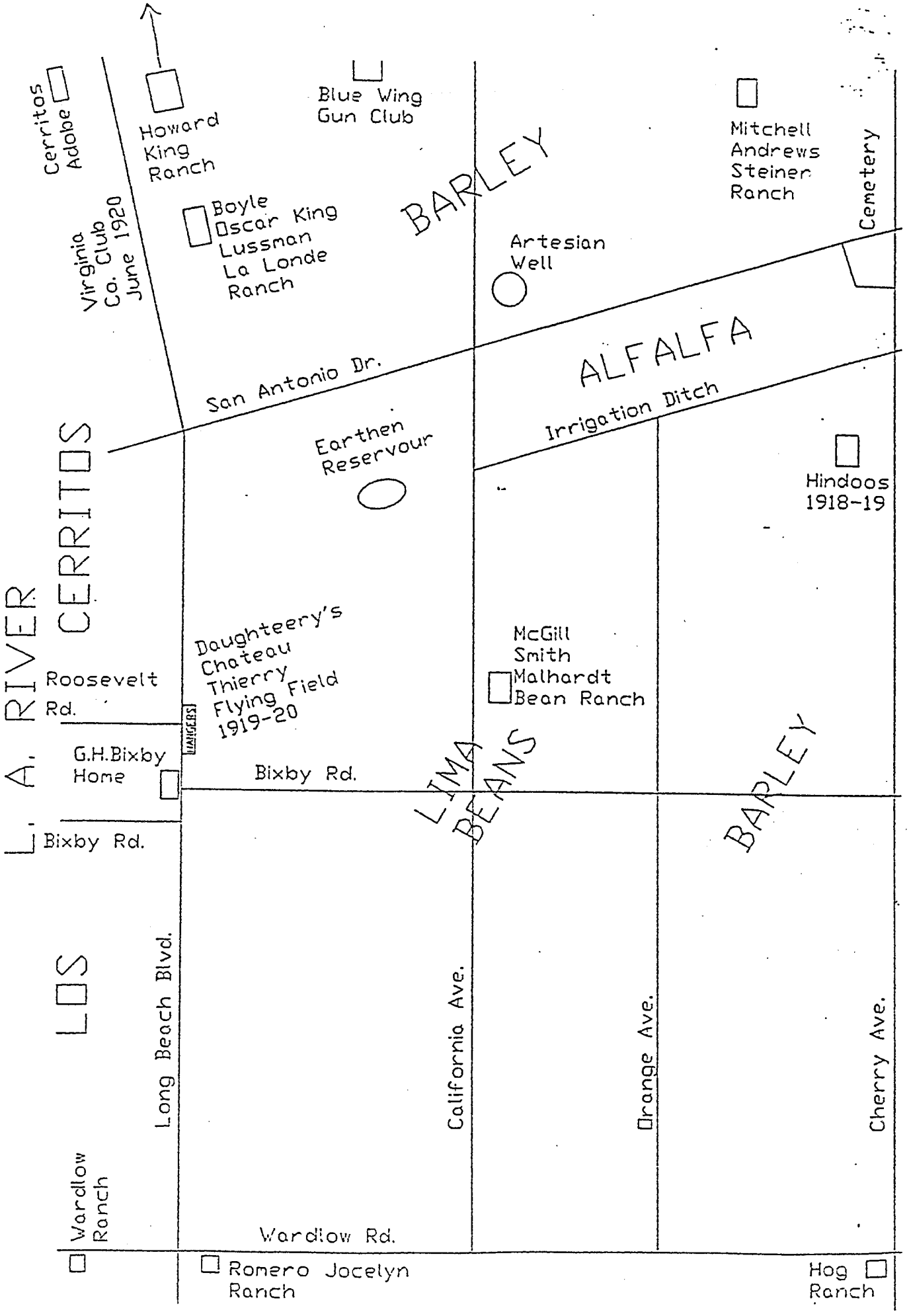


RANCHO LOS CERRITOS, 9705

courtesy of the Rancho Los Cerritos Foundation

CHP0365 ca. 1925

Manuel Liera standing @ southeast corner of RLC adobe feeding chickens; wooden bedrm. @ south veranda visible on house. Lieras lived @ RLC as married couple 1924-1926.

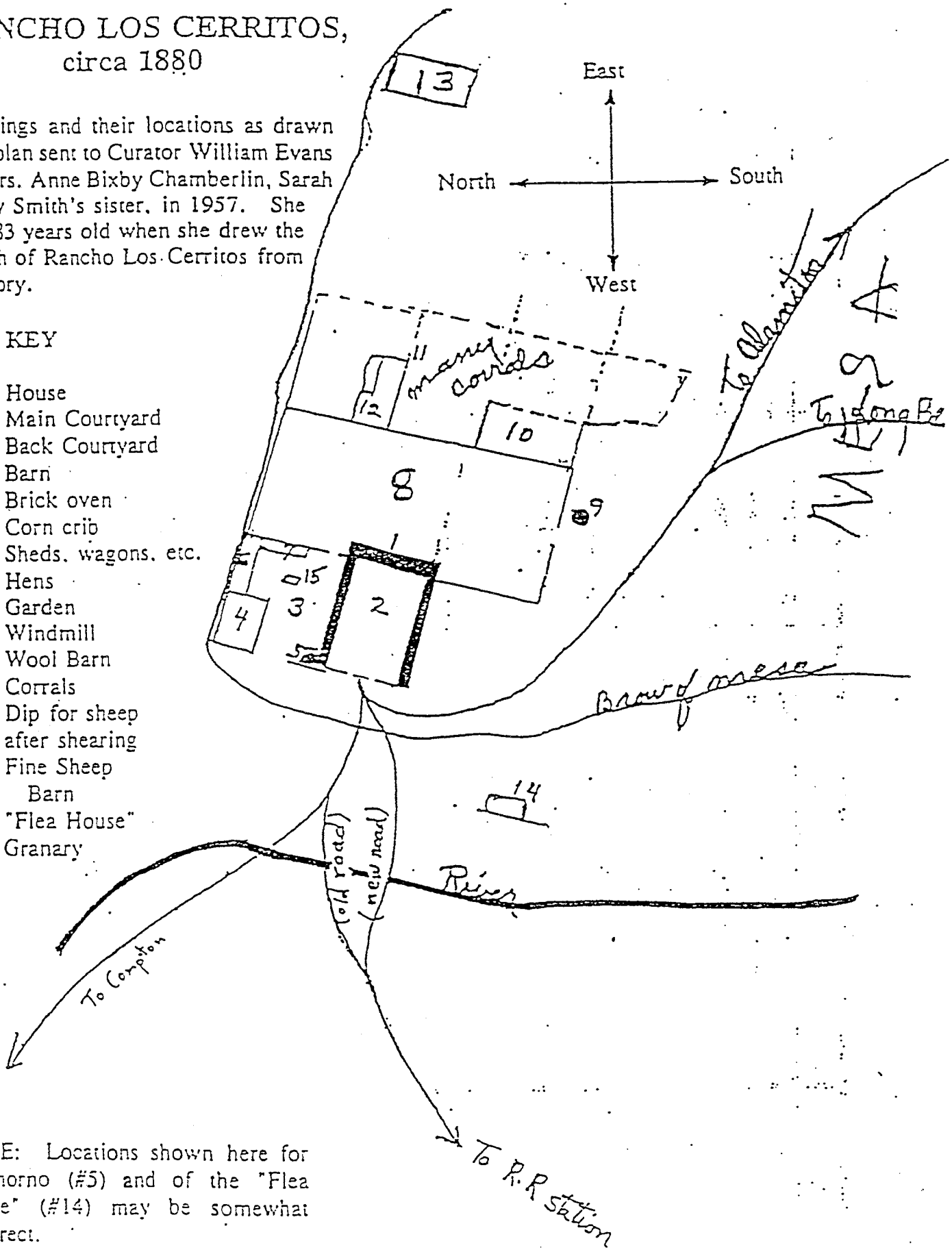

Howard King Ranch
Blue Wing Gun Club
Cerritos Adobe
Mitchell Andrews Steiner Ranch
Cemetery
Virginia Co. Club June 1920
Boyle Oscar King Lussman La Londe Ranch
BARLEY
Artesian Well
ALFALFA
San Antonio Dr.
Irrigation Ditch
Earthen Reservour
Hindoos 1918-19
L.A. RIVER
CERRITOS
Daughteery's Chateau Thierry Flying Field 1919-20
McGill Smith Malhardt Bean Ranch
Roosevelt Rd.
G.H.Bixby Home
Bixby Rd.
LIMA BEANS
BARLEY
Bixby Rd.
LOS
Long Beach Blvd.
California Ave.
Orange Ave.
Cherry Ave.
Wardlow Ranch
Wardlow Rd.
Romero Jocelyn Ranch
Hog Ranch

RANCHO LOS CERRITOS, circa 1880

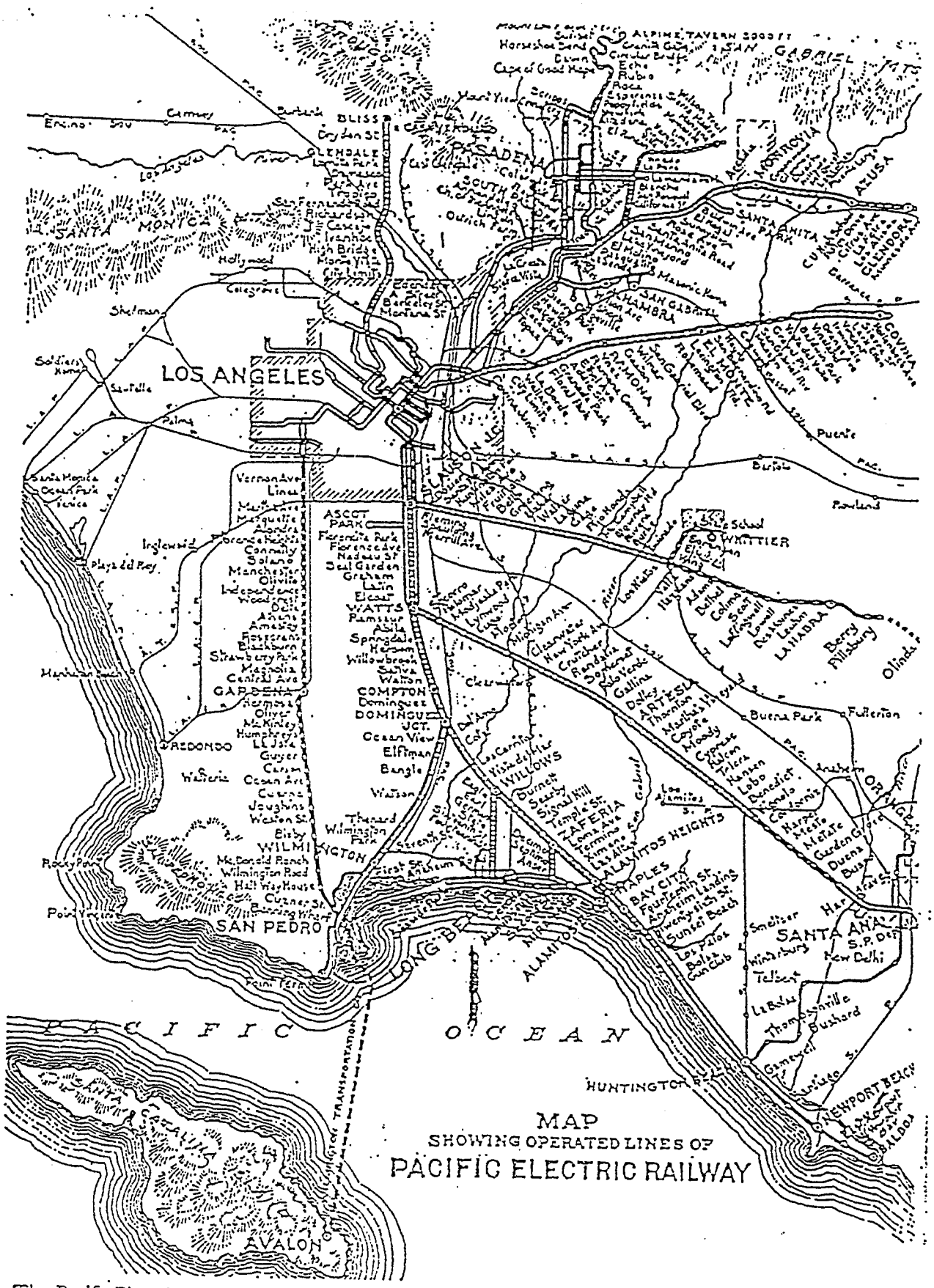
Buildings and their locations as drawn on a plan sent to Curator William Evans by Mrs. Anne Bixby Chamberlin, Sarah Bixby Smith's sister, in 1957. She was 83 years old when she drew the sketch of Rancho Los Cerritos from memory.

KEY

1. House
2. Main Courtyard
3. Back Courtyard
4. Barn
5. Brick oven
6. Corn crib
   Sheds, wagons, etc.
7. Hens
8. Garden
9. Windmill
10. Wool Barn
11. Corrals
12. Dip for sheep after shearing
13. Fine Sheep Barn
14. "Flea House"
15. Granary



NOTE: Locations shown here for the horno (#5) and of the "Flea House" (#14) may be somewhat incorrect.



The Pacific Electric in 1910. Compare the layout of the trolley system with southern California's current freeway network. Courtesy of the Huntington Library

The Bixby-Cornell Period: Remodeling Rancho Los Cerritos, 1930-1954

The southern properties of Flint, Bixby & Co. had been re-formed as the Bixby Land Company in 1898. It was owned equally by Jotham and Llewellyn Bixby Sr. (II),[109] who married Lillian Avis Smith in 1901. Llewellyn and Avis became the parents of Llewellyn Jr. (RI), born in 1908, and daughter Avis, who later married Paul Harwood Dudley. Llewellyn Bixby Sr., who graduated from Pomona College in 1901 and studied civil engineering at MIT, became a board member of Alamitos Land Company in 1907. He no doubt shared the interest of his uncle and cousin in restoring the ranch house. A newspaper article of January 8, 1913, indicated that Jotham and George H. Bixby had made plans to preserve the home and wanted to restore it to "as far as practicable, the style and atmosphere of the past."[110] The Bixbys hoped to replace the old stockade fence with a well-trimmed hedge" to keep out wandering marauders, whether on two legs or four" and put in a flat, waterproof roof.

It was not until 1930, however, that Llewellyn Bixby Sr., serving as president of the Bixby Land Company since 1921, could follow up on the project .[111] He entered into a contract with the construction firm of C. T. McGrew & Sons and began to develop ideas with architect Kenneth Wing, a friend with whom he had worked on other projects.[112] The preliminary design of August 1930 combined the original Monterey Colonial with a simplified Mission Revival style. On December 30, 1930, the Jotham Bixby Company sold Rancho Los Cerritos adobe and

---

[109] JotharWs brother Lewellyn died in 1896. Since Llewellyn Sr.'s mother Mary had died in 1882, he was raised by Aunt Martha Hathaway. He attended Pomona College and MIT before joining the Bixby Land Company in 1905.

[110] *Long Beach Press Telegram,* January 8, 1913.

[111] LIewellyn II was also a vice president of the Alamitos Land Company, president of the Long Beach Dairy and Creamery Company, president of the Soft Water Laundry Company of Long Beach, and vice president and treasurer of the Los Angeles Dock and Terminal Company. He remained as president of the Bixby Land Company until 1942.

[112] 0ral Interview with Llewellyn Brixby, Jr. and Elizabeth (Betty) Lewis Bixby by Susanne Warren and Ellen Calomiris, March 10, 1992.

4.7 remaining acres to nephew Llewellyn Bixby Sr. for $1.00.[113] Llewellyn moved to the ranch house with his wife Avis and son Llewellyn Jr. on St. Patrick's Day 1931.

Construction documents for the renovation were prepared by architect Wing and L. T. Evans, structural engineer. C. T. McGrew and Sons served as the general contractor. The Spanish-style shape and walls were retained and some of the newly constructed doors and hardware were based on original styles.[114] In the two-story central wing, two adobe walls and a ceiling were removed in order to fashion a larger dining room and a highceiling double-size living room. A sunporch was added off the dining and living room areas to extend the living space and connect rooms with no need to go outdoors. The upper and lower verandas were enclosed at the north end of the same wing to create a breakfast room, sleeping porch, bathroom and closets. In both one-story wings, adobe walls were, removed and altered to accommodate bedrooms, five bathrooms, a four-car garage and servants' quarters.[115] Tile roofing was installed and five cellars or vaults were excavated for furnaces and lined with concrete walls and floors.[116] Modem conveniences such as fireplaces, gas furnaces, plumbing and electricity were added to make the home suitable for modem living. A brick wall added in 1930 enclosed two acres to form a garden.

In 1930, Llewellyn Bixby Sr. hired the well-known landscape architect Ralph D. Cornell

---

[113] Legal documents, Book 10598, p. 29, County of Los Angeles, copy in Rancho Los Cerritos archives. Margaret Bixby, Jotham's widow, had died in 1927.

[114] While the architect preserved as much of the original structure as possible, the residence was essentially renovated in the popular and romanticized Spanish Colonial Revival style of the period." Summary, Historic Structure Report Reference Manual.

[115] A bond-beam of reinforced concrete placed during renovation helped the building withstand the 1933 Long Beach earthquake.

[116] "On the ground floor there were eighteen rooms; three on the second. The enclosed portions of the building contained approximately 10,456 square feet and the covered porches 4, 100 square feet." Letter from Samuel E. Vickers, City Manager, to Honorable Mayor and City Council, Long Beach, dated April 28, 1953. Copy in Rancho Los Cerritos archives.

to create a garden plan for Rancho Los Cerritos.[117] Both Cornell and Bixby wanted to incorporate native plants, preserve the trees and plants surviving from John Temple's formal garden, and rescue those remaining from Jotham and Margaret Bixby's time of residence. Those planted by Temple included an osage orange, three pomegranates, two citrus, two olive and three Italian cypress trees. Several black locust trees, offsprings of those that ringed the old garden fence line, still survived along with the large Moreton Bay fig from the Bixby era. "The forecourt incorporated three of the remaining trees from Temple's era while the perimeter was lined with exotic plants from tropical and other Mediterranean climate regions." [118]

Comell's overall plan called for a sweeping driveway for the southern entrance and western boundary, bordered by curving layers of trees and shrubs. Outside the south wing he planted a neat grid of both familiar and exotic fruit trees. Around the Moreton Bay fig, Comell laid out a central lawn bordered by trees and shrubs and bounded by a curved walkway. A brick path extended from the house to the country club gate, bisecting the entire garden. In the two northern comers, Cornell placed formal flower beds and rose gardens. At the south end, in the vicinity of the old wen, he had the ancient water tower repaired. Northward from the veranda of the house ran a replicated arbor. A red brick wall, painted white, surrounded this garden retreat, separating it from the country club to the east, service yard on the north and forecourt on the south. The inner courtyard was regraded and the newly bricked side walkways were joined near the sunporch by a brick terrace, below which lay a small pond planted with water lilies. Cornell

---

[117] Ralph Cornell of the firm of Cook, Hall & Cornell graduated from Pomona College and the Harvard University School of Design. He conceived the master plans of such major projects as Elysian Park and Griffith Park in Los Angeles, and with Theodore Payne, developed the Torrey Pines Park, native plantings at Pomona College, the grounds at Occidental College and a number of parks and residences. Famous for his city planning and large scale projects for major universities, Cornell became a Fellow of the American Society of Landscape Architects and earned several awards for his design work. He died in 1972. See Victoria Padilla, *Southern California Gardens: An Illustrated History* (Santa Barbara: Allen A. Knoll, 1994), 115-116 and 166; also Winifred Starr Dobyns, *California Gardens* (Santa Barbara: Allen A. Knoll, 1996; reprinted from the original edition published in New York by The Macmillan Co., 1931), p. 226. Comell's papers are at UCLA.

[118] Bamidge-McIntyre, "Rancho Los Cerritos," p. 13.

framed the garden's grassy center with a formal boxwood hedge, planted several sycamores, citrus, flowering fruit trees, an olive and several shrubs and perennials.[119] Overall, Comell created a pleasant garden atmosphere to surround the remodeled living quarters of the Bixby family.

From March 6 to 13, 1934, an I-Estoric American Buildings Survey was made of Rancho Los Cerritos under the supervision of District Officer Henry F. Withey and Squad leader Dan Cathcart. In 1937 the rancho was designated by the Advisory Conu-nittee on Historical American Buildings Survey of the Department of the Interior as possessing "exceptional historic or architectural interest" and being "most worthy of careful preservation for the benefit of future generations."

The ranch house was indeed a spacious and luxurious home representing a romanticized bygone era of southern Califomia.The Bixbys entertained frequently, especially for Sunday dinner. Rabbit was a favorite meal. At Christmas time the entire family would return for the festivities and to see the large two-story Christmas tree by the fireplace. Although the tree was lit with real candles, no one considered it a fire hazard. At Easter the children would come for the annual Easter egg hunt. Athough the Bixbys no doubt enjoyed the idea of the earlier "rancho days," they kept up with modem developments. Avis Bixby began driving her own car as early as 1916.[120] One of Llewellyn Bixby Sr.'s hobbies was photography and he used one of the rooms in the south wing as a darkroom. Ms other hobby was golf -- just beyond his garden at the Virginia Country Club -- and he enjoyed horseback riding, especially at Yosemite Valley. Avis Bixby liked to have family gatherings, entertain friends, especially at

[119]Comell's landscape designs and historic photos located in Rancho Los Cerritos archives and photo collection.

[120]0ral Interview with Llewellyn Bixby, Jr., March 10, 1992. Bixby recalled that Avis "was pretty short" so "they had to put some extensions on the clutch and the brake... She was a pretty good driver."

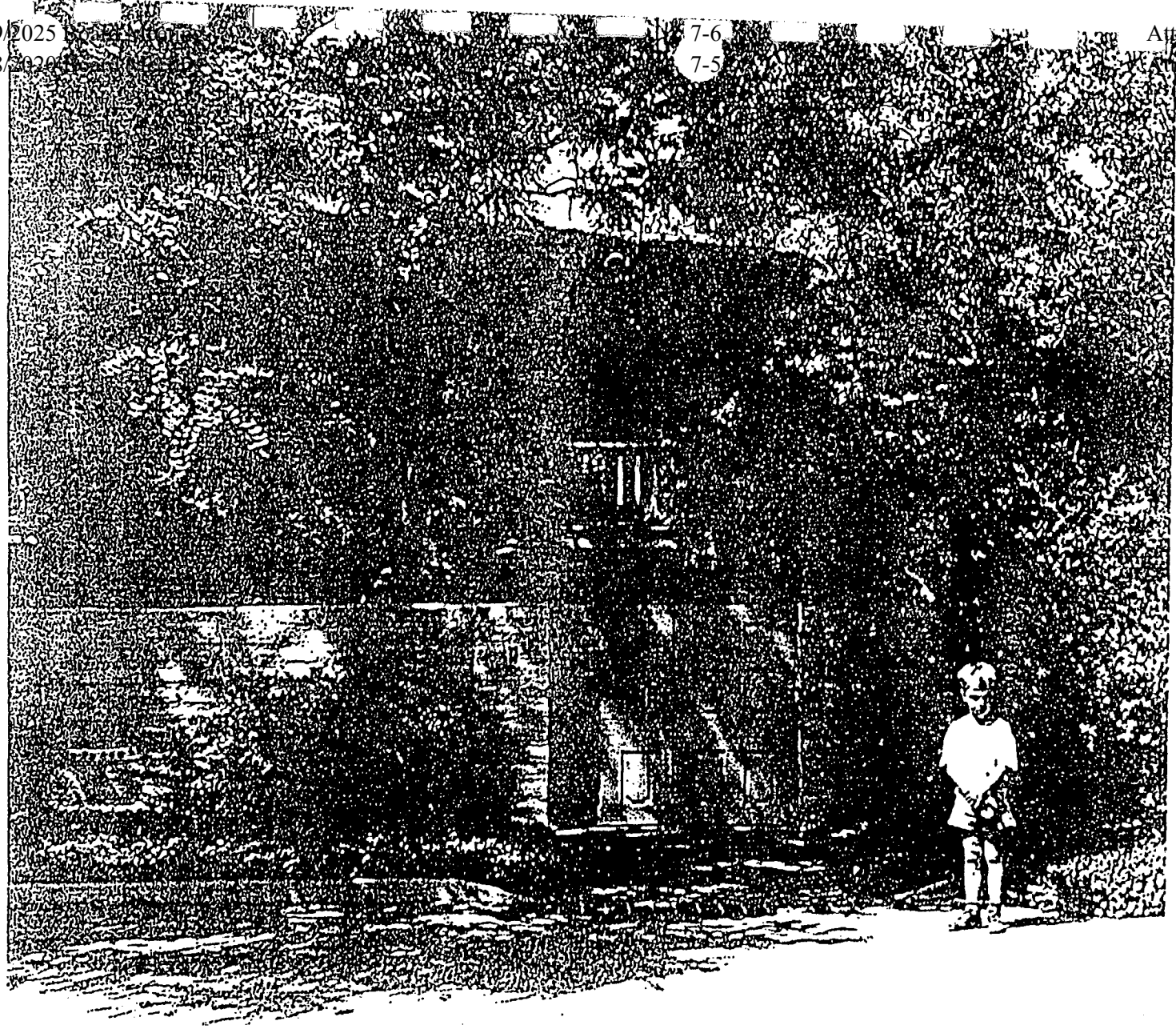
bridge parties, work in the garden, and carry on a lifestyle reminiscent to the earlier tranquil days of ranch living.

The Bixbys continued to occupy Rancho Los Cerritos until the death of Llewellyn Bixby Sr. in 1942 left his widow Avis alone in the rambling adobe. Son Llewellyn Jr. had moved out in the summer of 1934, shortly after marrying Elizabeth Church Lewis, and daughter Avis Dudley lived with her husband Paul and sons Paul and Stephen elsewhere, although they spent a few months at the ranch in 1947 while building a new home.[121] Avis Bixby lived at Los Cerritos a few more years but then moved to the Villa Riviera apartments overlooking the Pacific Ocean near downtown Long Beach. Beginning in 1943, the city of Long Beach began working to acquire the rancho as an historic site. Efforts by the state or a combined purchase of city, county and state failed in 1945. Finally, in December 1954, under Resolution No. C-15278, the City of Long Beach leased the rancho for one year for $ 1 0,000 (to be applied to the purchase price) and reserved an option to buy it for $80,000 if the option were exercised by October 1955. The City, which had opened a museum -on the site, decided to exercise the option but needed an extension until September 1956 to pay the balance of $70,000. The City, having been granted the extension, completed the purchase of Rancho Los Cerritos in that month for use as an historical monument, park, and library. Its total cost amounted to $82,400. Avis Smith Bixby died on June 29, 1959 and Rancho Los Cerritos was designated as a National Historic Landmark with appropriate dedication ceremonies on October 22, 1970.[122]

---

[121] Paul Dudley, a geologist maintained an office at Rancho Los Cerritos from 1947 to 1954 while caretakers maintained the grounds. Stephen B. Dudley is the author of *The Bixby Family Guide* published in 1996.

[122] Obituary for Avis S. Bixby, dedication paperwork and plaque at Rancho Los Cerritos.



RANCHO LOS CERRITOS, 9705

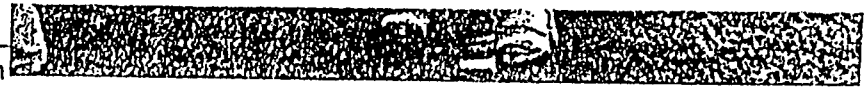
CHP0666

Stephen B. Dudley

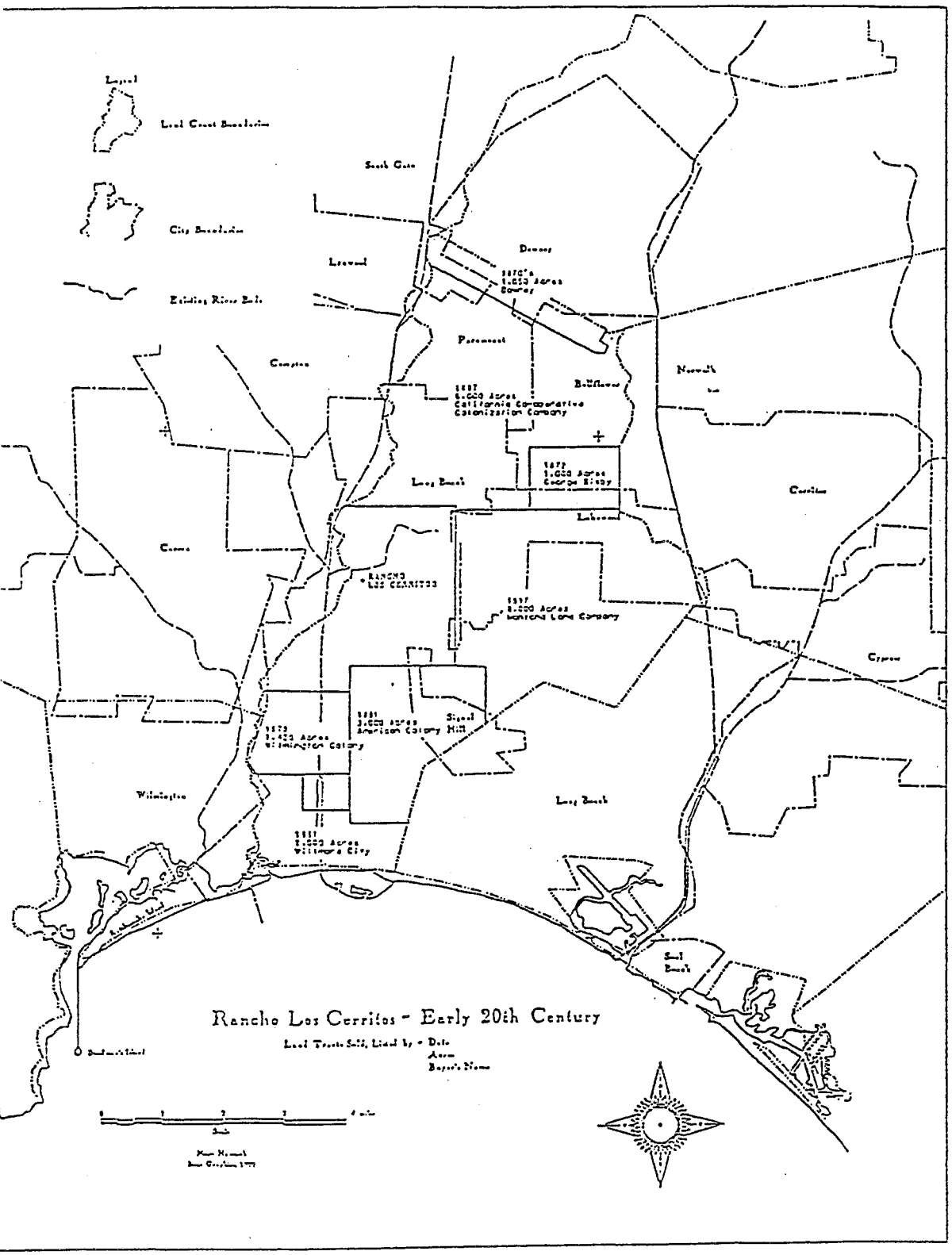
Photo courtesy of the Rancho Los Cerritos Foundation

RANCHO LOS CERRITOS, 9705

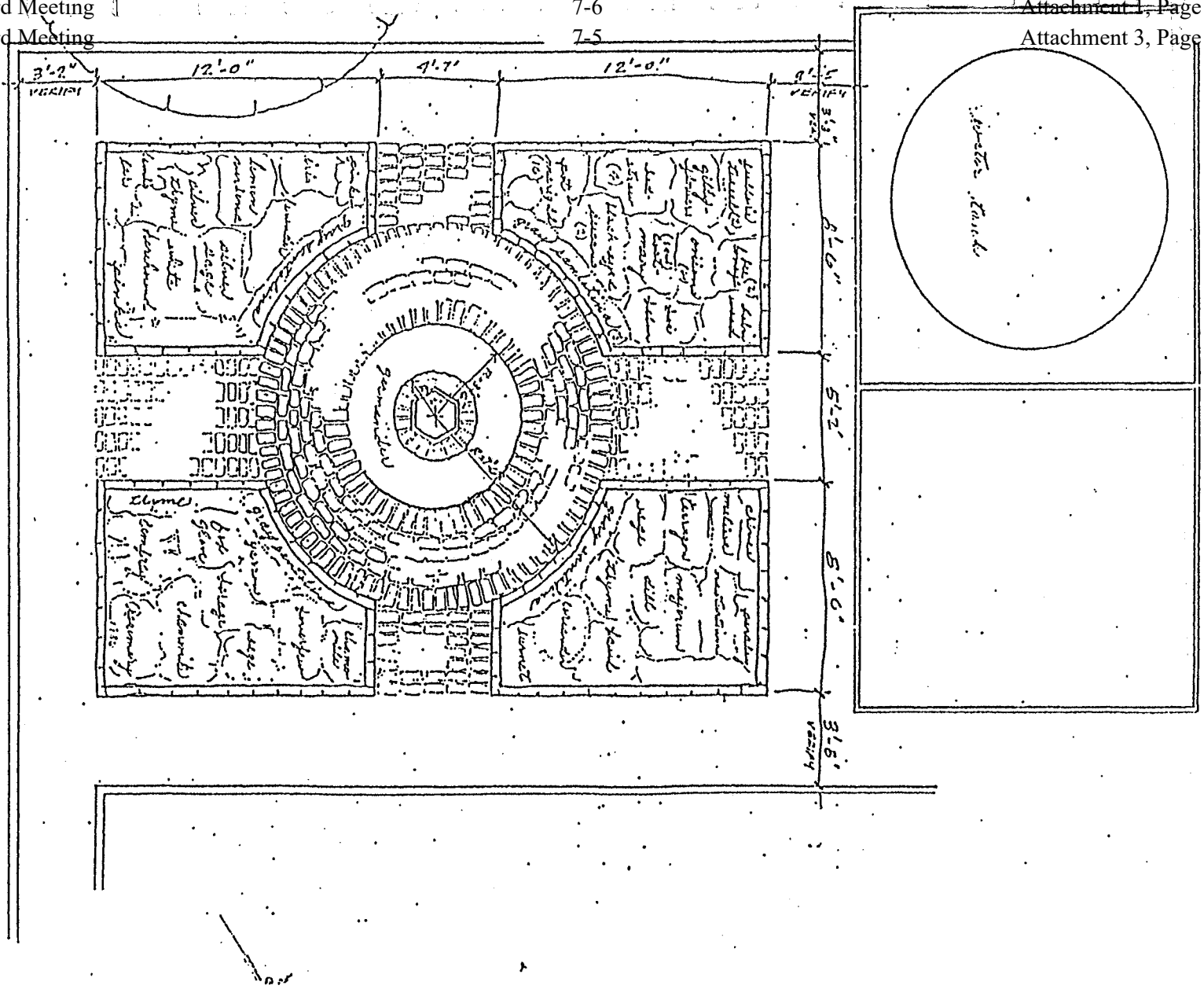
Photo courtesy of the Rancho Los Cerritos Foundation

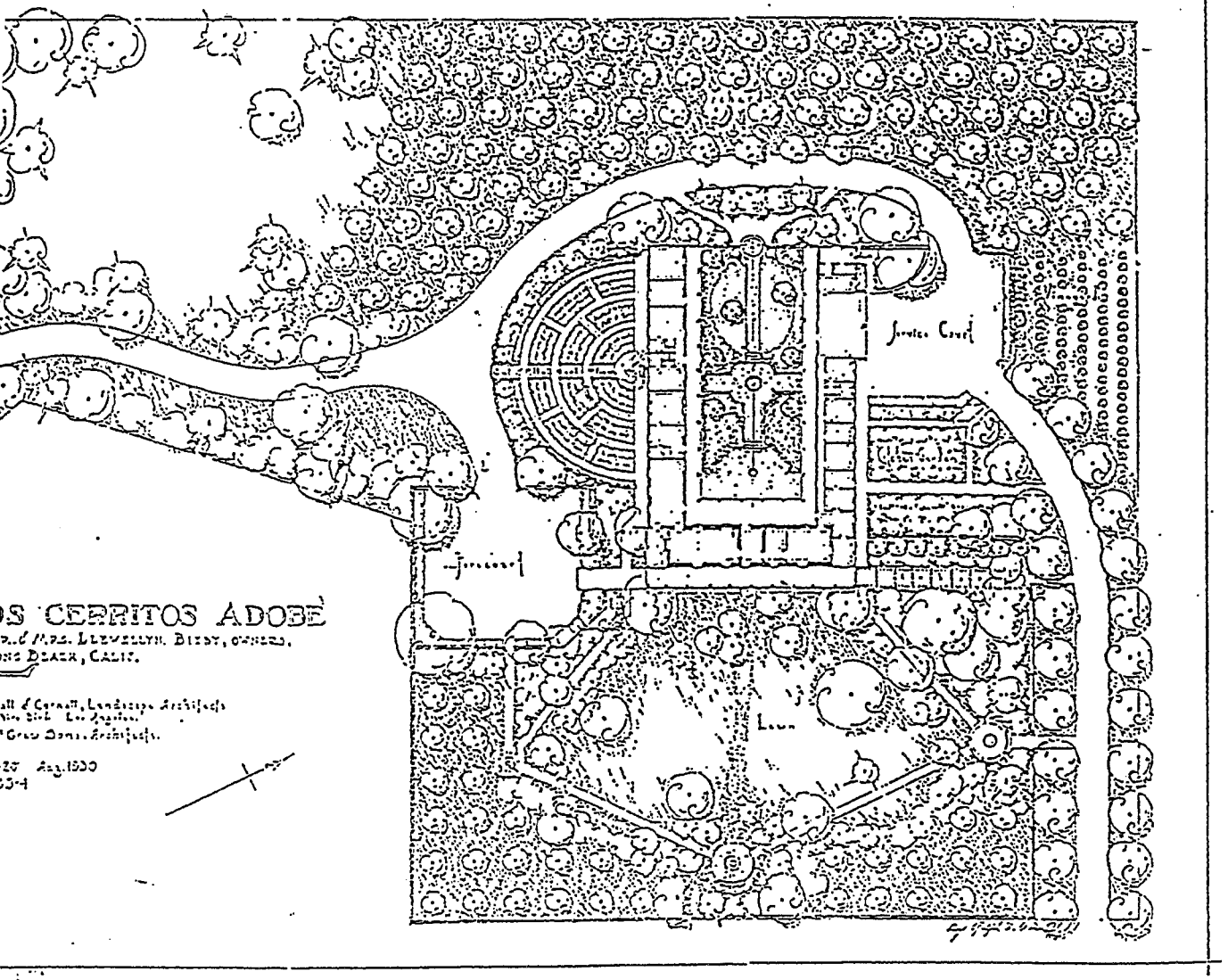


Avig Bixby Dudley, Stephen Dudley & the Talbots


Rancho Los Cerritos - Early 20th Century

THE HERB GARDEN




OS CERRITOS ADOBE
Aug. 1930

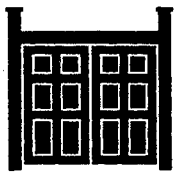
LIST OF IMPORTANT DATES IN THE HISTORY OF RANCHO LOS CERRITOS

1200-1769	Tongva people (Gabrieleno Indians) live on lands later known as Rancho Los Cerritos; village of Tibahangna said to be north of present ranch house
1769	First Spanish settlement in California at San Diego
1771	Mission San Gabriel founded
1781	El Pueblo de los Angeles founded
1784/90	Spanish soldier Manuel Nietō receives land encompassing about 300,000 acres; this is cut back to 167,000 acres
1804	Manuel Nieto dies; his land is inherited jointly by his four surviving children
1821	Mexico achieves independence from Spain
1822	California comes under Mexican rule; Mexican period begins
1834	Mission lands are secularized and the missions are closed
1834	Nieto's land is formally divided into smaller ranchos. Daughter Manuela de Cota receives the 27,000 acre portion known as Rancho Los Cerritos
1843	John Temple purchases Rancho Los Cerritos for $3,000 (December)
1844	John Temple builds the present Monterey-style adobe
1846-48	Mexican-American War
1848	California becomes a U.S. territory
1848	Gold is discovered in northern California

1849	The Gold Rush begins
1849	Benjamin Flint comes to California to seek his fortune in the gold fields
1850	California becomes a state
1851	Thomas Flint and Lewellyn Bixby arrive in the gold fields
1852/53	John Temple successfully defends his title to Rancho Los Cerritos before the U.S. Land Commission
1852	Jotham and Marcellus Bixby, brothers of Lewellyn Bixby, arrive in the gold fields
1853	Benjamin and Thomas Flint, and Lewellyn Bixby, form Flint, Bixby & Company and bring sheep to California
1861-65	Civil War
1862/64	Period of severe floods and droughts in southern California that devastates the cattle industry
1866 &	John Temple sells Rancho Los Cerritos to Flint, Bixby Company
1866	Jotham Bixby and his family move to Rancho Los Cerritos to manage Flint, Bixby & Company's sheep ranching operations
1869	Jotham Bixby buys a half interest in Rancho Los Cerritos and forms J. Bixby & Company
1874	Jotham Bixby buys an interest in Rancho Palos Verdes
1877	Reverend George Hathaway and Martha Hathaway move to Rancho Los Cerritos
1878	John Bixby, a cousin of Jotham and Lewellyn Bixby's, leases Rancho Los Alamitos

1881	Jotham Bixby and his family move to Los Angeles
1881	J. Bixby & Company, together with John Bixby and I.W. Hellman, purchase Rancho Los Alamitos
1881	Jotham Bixby provides lease with option to buy of 4000 acres to William Willmore for the founding of a town, Willmore City, and agricultural community
1884	William Willmore is unsuccessful in forming his town, but the Long Beach Land and Water Company purchases his option and renames the town Long Beach
1884/85	Jotham Bixby family moves back to Long Beach and builds a home on Ocean
1887	Long Beach is incorporated
1897	7,000 acres of Rancho Los Cerritos lands sold to Senator from Montana; later becomes Lakewood
1906	1440 acres of Rancho Los Cerritos lands sold; City of Bellflower founded
1930-31	Rancho Los Cerritos is remodeled by Llewellyn Bixby, Sr. for a family residence
1942	Llewellyn Bixby, Sr. dies
1955	Rancho Los Cerritos is acquired by the City of Long Beach and opened to the public as a museum

5.2 INTERPRETIVE REPORT



Rancho Los Cerritos:
Gateway to the Past

Interpretive Plan for Rancho Los Cerritos Historic Site
Long Beach, California

Based on Work by Michael Follin,
Interpretive Specialist

Revised and Expanded,
Rancho Los Cerritos Historic Site
February 11, 1999

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INTRODUCTION

Rancho Los Cerritos presents unique challenges as a historic site. The site spans a long history, from the earliest times of Native American habitation through Spanish, Mexican and American settlement. Its original 27,000 acres were carved from a larger, 18th century Spanish land grant and the current adobe house was constructed in 1844. In 1930 the house was remodeled and modernized in the popular Mission Revival style, and the remaining 4.74 acre property was re-landscaped for the family's private use.

The site's 20th century features reflect the lifestyles of a well-to-do and highly respected Long Beach family, but this is only one chapter of a much broader story. Earlier stories, including those of cattle and sheep ranching, the development of towns and cities, and the ethnic groups associated with the Rancho, provide an important understanding of growth, change and diversity that reflect the history of Southern California from earliest times to the present. Therefore, the site's mission and challenge must be to interpret *all* of the diverse peoples who lived and worked on the Rancho and contributed to the development of the greater Long Beach area.

The Interpretive Plan proposes solutions to this dilemma. After many years of debate over whether to authorize a 19th century restoration, the City received a National Endowment for the Humanities (NEH) Self-Study Grant to explore alternative uses and interpretations of the site. Under the grant, a consultant team re-examined the option of restoring the Rancho to its appearance in the 1870s in order to more easily interpret the site's ranching history. Members also discussed the pros and cons of retaining 1930s changes now considered historic according to the Secretary of the Interior's Standards.

The NEH team, a group of nationally renowned humanities scholars, interpretive specialists and preservationists, ultimately recommended that the City retain 1930s changes to the structure and grounds.[1] However, in order to be able to emphasize the site's 19th century significance within the 1930s physical resource, they recommended the use of first person interpreters posing as "Visitors from the Past." With this format, the site could retain its 20th century modifications but interpreters would share both 19th and 20th century stories through their representative roles as historical people associated with the Rancho. The focus for historical characters would be on four periods: the Temple period (1844-1866), the early Bixby era (1866-1890); the Tenant period (1890-1929); and the Bixby/Cornell era (1930-1942).

This Interpretive Plan expands upon the NEH proposal and recommends several significant changes. The plan calls for reconstruction of the 1830s Cota Adobe and the 19th century barn and barnyard. In addition to providing much needed space for visitor services, collections storage and staff offices, these structures will provide appropriate backdrops for the site's rich 19th century history. In addition, the NEH interpreters initially suggested the removal of period rooms, with the interpreters using internal

[1] The recommendations from the National Endowment for the Humanities self-study were approved by the Mayor's Advisory Task Force, which spent three years (1990-1993) studying an appropriate future course for the Rancho. The NEH proposals and Task Force recommendations were then adopted by the Long Beach City Council in 1993.

spaces and artifacts as "stages" and "props" for their living history performances. In response to widespread discomfort with this concept, this plan now recommends the furnishing of various rooms in the house to reflect different interpretive periods. Period rooms will add additional physical support to the concept of the Rancho as a "Home" for many peoples.

The central interpretive theme "Home" is inclusive of several areas: a home for many families over time, as well as the "home" of Long Beach – the place where Long Beach began. Rancho Los Cerritos is also "home" of the nearby cities of Lakewood, Bellflower, Paramount, and much of Signal Hill, all founded on the Rancho's original 27,000 acres. The development of additional themes will incorporate information on social, economic, political, religious, family and agricultural developments and changes over a hundred year span of time. These themes will provide broad avenues of access by which the visitor may contact the past via the historic site, and the site will serve as a visitor's "gateway" to the past. By utilizing these different avenues to the past within the context of a specified time period, a visitor will realize where and how he and the community fit into the larger picture of the locality, region and nation.

DEFINITIONS

Museums are wonderful repositories filled with artifacts, or 'treasures" of the past; in addition, historic buildings and sites often have significant architectural and landscape value. However, the most important treasure of museums and historic properties is the ability of these repositories to link us with, and teach us about, our past.

What is an interpreter?

An interpreter is a person who is endowed with the responsibility of fostering understanding. Using a variety of interpretive methods, he or she makes history come alive and provides avenues of access into the past for the visitor.

Museum interpreters, sometimes called "docents," "tour guides," "teachers" or "instructors," are dedicated to learning, teaching and studying. Their role is to "translate, or explain, objects, culture and/or events to visitors. A good interpreter does not overload people with facts, but rather opens their minds and awakens curiosities. As Freeman Tilden, author of Interpreting our Heritage, writes, "an interpreter does not inform as much as he provokes." It should be the primary objective of any interpreter to provoke within the visitor a sense of enthusiasm, inquiry and a love of history, as well as a sense of the overall purpose of the site.

What is interpretation?

Interpretation is a communication process designed to reveal meanings and relationships of our cultural and natural heritage to the public [visitors] through first-hand experiences with characters, artifacts, landscapes, and sites.

Information as such is not interpretation; interpretation is revelation *based upon* information. Again, as Freeman Tilden states, it is the revelation of a larger truth that lies behind any statement of fact. The simple fact that a great battle was won or lost makes little impression on our minds. But our curiosity and attention are much excited by each detail of the event, and through this our minds and spirits are enriched.

Interpretation involves three key elements:

Information - any information, facts, artifacts
Audience - various audiences have various needs
Method - what interpretive method will be used

Utilizing these three elements of interpretation, one can strive to create within the listener not a distaste for history, but rather a desire to do further research in an area that catches his or her interest. People who visit sites and museums are seeking not only education and enjoyment but also further instruction and inspiration.

Freeman Tilden's six principles of interpretation:

1. Any interpretation that does not somehow relate what is being displayed or described to something within the personality or experience of the visitor will be sterile.
2. Information, as such, is not interpretation. Interpretation is revelation based upon information. But they are entirely different things. However, all interpretation includes information.
3. Interpretation is an art, which combines many arts, whether the materials presented are scientific, historical, or architectural. Any art is in some degree teachable.
4. The chief aim of Interpretation is not instruction, but provocation.
5. Interpretation should aim to present a whole rather than a part, and must address itself to the whole man rather than any phase.
6. Interpretation addressed to children (say, up to the age of twelve) should not be a dilution of the presentation to adults, but should follow a fundamentally different approach. To be at its best it will require a separate program.

Interpretive methods

Displays and formal exhibits, guided tours, self-guided tour brochures, stationed tours, demonstrations, hands-on activities, informational signage, audio devices, publications, special events, lectures, workshops and school programs are among the diverse methods used in museum interpretation.

Most tours tend to be offered in the "third person," with the tour guide and visitor both speaking in the present. "Wander-at-will" tour methods (self-guided tours) are also common in museums, though less frequently employed in historic house museums. Stationed tours, whereby the tour guide remains in one place while the visitor moves from space to space, are often useful when accommodating a large group of people at one time. "First person" interpretation, when the docent takes on a role as a historic character, can be used to augment and highlight special events, educational programs, or to point up specific objectives of a site. These methods are all currently employed to some extent at Rancho Los Cerritos.

First Person

A first-person interpreter portrays a character from the period and speaks in the present tense of the period. Example: "This is how we cook."

First person role-playing is not a new concept in museum interpretation. However, the way it is used is constantly changing. Essentially it combines theater arts with living history activities. First person, unlike the more widely performed third person interpretation, allows the interpreter to convey not only facts, but also thoughts, emotions and attitudes as well. The purpose of first person is to make the people of the period come alive. Its goal is to present the human side of history and thus afford the visitor a better understanding of the

past, allowing the visitor to identify, compare, and contrast people of the past with the present day and to connect their time and ours.

First person tours help put history on a personal level where identification with the people who lived in the past is made easier. It is the only mode of interpretation that can effectively bring social history to life.

"Visitor from the Past"

"Visitor from the Past" is the name we have selected for interpreters providing first person tours in "Rancho Los Cerritos: Gateway to the Past." These tours have also been called "ghost interpretation." The interpreter assumes a character and role plays in the first person, but as a "ghost" is allowed to transcend time barriers and make post and pre-period comparisons for the visitor.

At the Rancho, the Visitor from the Past interpreter will assume the role of one of the Rancho's many historic peoples: owners, relatives, guests, workers or business acquaintances. The character will thoroughly research his or her history as it relates to the Rancho, assume the persona of the historic character, wear an appropriate costume, use correct language and deportment, and interact with visitors as if he or she had come forward in time.

Each Visitor from the Past character will have a specific story to tell based upon the site's main themes and interpretive objectives. The objectives will relate to the character's place in the context of his or her time period, relative to the Rancho and the development of Long Beach. A Visitor from the Past will not utilize the "Gee whiz, things have changed" approach, but rather will compare and contrast changes with his or her time period. The Visitor from the Past's task is to lead the public to a conclusion, not to make conclusions for them.

Second Person, or Hands-On Activities

Second person interpretation refers to when an interpreter and a visitor engage together in an activity of the period. Neither assumes any historic role or wears a period costume, and the activity takes place in the present day. Examples of second person interpretation, often referred to as "hands-on activities," include butter churning, games, washing clothes, cooking and sewing.

Third Person

In third person tours, an interpreter may or may not wear a costume. The interpreter speaks of the past in present day tense and from the standpoint of a modern observer. For example, a third person interpreter would say "This is the way they cooked;" contrast this with a first person interpreter, who would refer to this same activity by saying "This is the way we cook."

Stationing

Some historic sites have developed a compromise between the fully conducted tour and the wander-at-will type with no formal interpretation. This is called "stationing," and it can usually accommodate a large group of people at one time. A short introductory interpretation is given at the first station with directions about the exhibits--where to go next, the pattern of traffic, and so forth. The first interpreter also indicates that there will be other interpreters in specified areas along the way who will discuss the history of the site and answer questions. In each subsequent room, visitors encounter new stationary interpreters and may remain as long as they wish to view the exhibits, ask questions, and listen to discussions between the interpreter and other visitors. With this format, visitors may also choose to skip rooms and define their own traffic patterns.

Interpretive Techniques

Good interpretation uses a number of techniques to encourage dialogue, engage the senses, awaken curiosity and thought, and provide a smooth and appealing story. These include questioning strategies, non-verbal communication, engaging of the senses, transitions and storytelling. Other techniques include inductive methods of reasoning and discussion.

Inductive Method

The inductive method is simply a method of arriving at truth by observing many particular facts and drawing general truths from them. It is the opposite of the deductive method, which begins with general truths and then reasons from them to determine the particulars. In the deductive method, for example, one relies more on the authority of others. The interpreter explains that *electric lighting and wiring in homes began after Edison's invention of the incandescent bulb in 1879; a historic house built in 1870, therefore, couldn't have had an electric washing machine.* In the inductive method, visitors rely more on their own observations to reach that same conclusion. In this case, the interpreter notes that *the house has no evidence of wiring, lights, or any kind of electric appliance. However, it does have a big tub in a room adjacent to the kitchen area, and that room has hooks on the wall that might have held a clothesline.* From this the visitor will hopefully conclude that they did not have an electric washing machine and that they probably washed clothing by hand.

Discussion

A good way of facilitating audience participation is through comparison discussion. The interpreter asks visitors to compare their lives with the lives of the people who lived at the site. Here, the interpreter is in control of the situation at all times and should hold the discussion without monopolizing it. To start out the discussion, the interpreter might ask questions and let visitors try to guess the correct answer.

This type of involvement does not require any special equipment; the setting and artifacts provide the clues. The result is direct involvement of visitors who are able to compare their own experiences and possessions to those people and artifacts of the period.

SITE MISSION STATEMENT

The mission of Rancho Los Cerritos Historic Site is to restore and preserve the structure and grounds; collect appropriate resources; and interpret the relationship of the Rancho's diverse peoples to the development of the Long Beach area.

This will be accomplished through a broad spectrum of educational programs, exhibits and publications designed to provide local residents, students and other visitors with an understanding of the forces that shaped this region.

To support the Mission Statement, the following objectives have been established:

* to conduct, encourage, produce and share scholarly research on the history of Rancho Los Cerritos

* to advocate, preserve and manage the site's historical, architectural, botanical and archaeological resources

* to collect, preserve and manage appropriate and authentic artifacts

* to develop innovative and effective interpretive programs on Rancho Los Cerritos history

* to supplement the teaching of local and Southern California history in the classroom

* to encourage local history instruction in the schools and colleges

* to expand resources and increase accessibility of the archives, research files and research library

INTERPRETIVE PLAN GOALS AND CONSIDERATIONS

The primary goal of the interpretive plan, based on the site's adopted Mission Statement, is to interpret the relationship of the Rancho's diverse peoples to the development of the greater Long Beach area.

An important consideration in determining the site's mission and interpretive focus is its uniqueness. Rancho Los Cerritos must develop its own distinct image, own unique public offerings, and its own reason for existence. While all sites need to develop a niche in the community, the existence of a second Long Beach rancho, Rancho Los Alamitos, with a similar name and intertwining history provides special challenges for Rancho Los Cerritos.

The City of Long Beach is fortunate to have the two historic ranchos within its borders and, despite many similarities, there are also distinct differences. Rancho Los Alamitos' primary physical resources, including most structures, the collections and gardens, date to the 1920s and '30s, and the focus is on one family and its continuous occupation of the site. Therefore, in planning for Rancho Los Cerritos, decisions must focus on the need to provide a complementary, rather than a competitive message; one that is also unique, challenging, fluid and easy to articulate.

The site's interpretive mission takes this into consideration. Rancho Los Cerritos is the originator, or "home," of Long Beach and should capitalize upon this in its programming. The site's docents also offer a "homey feel" to visitors through their personal, interactive and engaging hands-on special events and school programs and their friendly demeanor when welcoming visitors. The interpretive program should focus especially on the local Long Beach and regional community for both its program themes and audiences. To continue to attract repeat visits and on-going support from the local community, the interpretive program needs to be changing, educational and entertaining. Programming also needs to allow for growth and be responsive to issues of current interest and concern in the community. Provision of community meeting space is an important consideration in order to help Rancho Los Cerritos become "the friendly neighborhood Rancho," existing to serve the Long Beach area and its surrounding communities.

Additionally, to strengthen the site's educational mission, Rancho Los Cerritos should expand upon its already successful 4th grade school program and work closely with local schools and colleges. Therefore, interpretive goals include an expansion of the current 4th grade school program; development of additional programs for grades K-12 where appropriate; and increased emphasis on college-level internships, collaborative projects and joint teaching efforts. In this way the Rancho will position itself persuasively and solidly in the community as an important educational resource.

Rancho Los Cerritos' interpretive strength also lies in its ability to illustrate life at the Rancho in the 1800s. In developing the interpretive program, it is important to ensure that emphasis be given to the 19th century even as the program expands to include the history of the site through 1940.

Finally, it is important to recognize that the site is not a primary visitor attraction for the City of Long Beach due to its location and size. However, Heritage Tourism is an increasingly popular travel motivation and Rancho Los Cerritos, along with its sister Rancho, is in a position to benefit from tourist and convention travelers remaining a few extra days in the Long Beach area.

SITE RESOURCES

The current 4.74 acre site includes the two-story adobe ranch house, built in 1844 in the Monterey-Colonial style and remodeled in 1930 in the Mission Revival style; and the surrounding estate gardens designed by noted landscape architect Ralph D. Cornell in 1931. The two-acre formal garden to the east of the adobe contains a number of trees dating to the original Temple garden from the 1840s-50s, as well as a magnificent Moreton Bay Fig planted around 1880.

The house and formal gardens are surrounded with additional landscaped grounds that encompass native California vegetation. There is also a Forecourt, or parking area, from 1931, and an arroyo region. The Master Plan calls for restoration of the 1930s orchard adjacent to the south side of the adobe and the Forecourt, installation of a Native California Garden, and the reintroduction of the 1830s Cota Adobe and mid-19th century barns complex and barnyard.

The Native California Garden will be a passive space extending north from the new Visitor Center and into the northwest corner of the property. It will be primarily for sensory enjoyment and relaxation. The area will also include an herb garden for use in school programs. The Cota Adobe will serve as a Visitor Center and the starting point for all tours. The barns complex will house staff, collections, the library and archives, and a public assembly room for community gatherings, films, lectures, workshops and site rentals. The newly created barnyard will serve as an important interpretive space for school programs and special events.

The museum's artifact collections number approximately 6,500 objects, and include furniture, textiles, ceramics, glass, tools, decorative arts, books and toys. The majority dates to the 1860s-80s, with the exception of the textiles collection which includes about 1000 items dating from the 1830s through the 1930s. The museum also houses a 3000 volume California History Research Library coordinated through the Long Beach Public Library system, and a small but important Archives focusing on Rancho history and including maps, photographs and documents. The museum owns few artifacts from the Temple era, Tenant period and the 1930s.

The proposed Interpretive Plan also requires additions to present museum collections, alterations in the treatment of space, and extra education and interpretive staff. When completed, Rancho Los Cerritos will present a unique and unparalleled opportunity for its visitors to experience, learn, relate, and understand the importance of Rancho individuals and family to the community of Long Beach and to Southern California. "Rancho Los

Cerritos: Gateway to the Past" brings to life the stories of those individuals and allows their tales to intertwine and weave the complex fabric of the site.

COLLECTIONS EMPHASIS

The collections shall contain artifacts reflecting the people who lived and worked at the Rancho from the 1840s to the 1940s, with emphasis on objects once owned by persons associated with the Rancho. Expanding the collection to include objects from the 1930s is a priority.

PHYSICAL CHANGES REQUIRED FOR THE NEW INTERPRETIVE PROGRAM

- Construction of the 1830s Cota Adobe
- Restoration of the 1930s orchard south of the adobe (following removal of the existing Spanish tiled patio and Mexican courtyard)
- Construction of a new Caretaker Residence
- Restoration of the main garden and inner courtyard to the 1930s
- Relocation of the herb garden to the Native Garden area in the northwest corner of the property
- Construction of the mid-19th century barns complex and barnyard (replacing the existing "private garden" north of the kitchen area, and the soil cement roadway outside the current Visitor Center/1930s garage)
- Restoration of the adobe interior and installation of new period exhibits

INTERPRETIVE PROGRAM

The primary interpretive method will be first person living history tours through the adobe and formal gardens. Docents (paid and volunteer) will act as "Visitors from the Past" who have come forward in time. Each will share stories specific to his or her historic character and time frame as they lead museum visitors through the site.

Alternate interpretive methods include self-guided and third person tours, which may be used on occasion, and stationed tours to accommodate major events. Educational packet materials, outreach programs, and audio/visual techniques will also be utilized. The current educational school program and annual public program offerings are excellent and should be continued. In addition, changing exhibits focusing on the site's subject matter, collections and community history would serve to underscore the need for continued research, artifact study and preservation, and would enhance community awareness and relations. They would also link the significance of the site back to the community and further establish a sense of "home."

INTERPRETIVE THEMES

Good tours center on no more than three to five strong themes, or subjects; research shows that visitors won't remember more than this number. These themes should be of critical importance, sufficiently complete, and proven or illustrated by the evidence that is available.

The history of Rancho Los Cerritos lends itself to three broad and reoccurring interpretive themes. These are:

Home
Land and Economic Growth
Social and Cultural Diversity

These themes cover four distinct time periods in the Rancho's history and the stories frequently overlap. The four time periods are:

Temple: 1844-66
Early Bixby: 1866-90
Tenant: 1890-1929
Bixby/Cornell: 1929-54

Home

Rancho Los Cerritos was home to owners and workers who helped develop the greater Long Beach area, and was also "home" to several area cities—the place where Long Beach, Lakewood, Bellflower, Paramount and Signal Hill began.

The ranch house and gardens served as a summer home and retreat for their builder, John Temple, as well as headquarters for Temple's cattle ranching operations. After 1866 they became the southern headquarters of Flint, Bixby & Co., as well as the family home of Jotham and Margaret Bixby and several of their relatives. Jotham Bixby's employees also looked upon the house as their home port, and a number resided within the adobe walls. In

the late 19th century through the 1920s, the ranch house served as a rental for local workers. It became a private family home again in 1930.

"Rancho Los Cerritos: Gateway to the Past" utilizes this theme of "home" to tell the broad story of the early periods of the Rancho and its grounds. It also provides for the expansion of "home" to the development of Long Beach. Rancho Los Cerritos provided a "home" for one of the first families of Long Beach and for those who would later have a part in developing the City—and several neighboring cities. Comparison and contrast created by the different stories and characters allows the history to connect and continue from the early beginnings into the 1930 Bixby/Cornell period and on to present day. While the main artifact, the house of the Rancho, appears outwardly as it did in 1930, rooms in the wings will open doors to earlier periods in the history of Rancho Los Cerritos and Long Beach.

These gateways will help place the site and the visitor in the regional context of time and history, while maintaining a central theme of "home." The Rancho was, in fact, a home to not only the prominent families who owned it, but all who worked, lived, and visited there throughout the four selected time periods. With this concept the Interpretive Plan will be able to cover a wide expanse of time, presenting the perspectives of a number of individuals regarding the development of the Rancho and Long Beach, but still maintaining a "Welcome to ***Our*** Home" feel. For current residents of Long Beach, it also provides a sense of "ownership" in the site and its related history.

Supportive sub-themes under HOME include construction of the adobe as a home and headquarters; and the 1930s remodel, when new life was breathed into the adobe. Through Visitor from the Past interpretation, Temple, workers and servants can explain construction choices and techniques in the 1840s and explore Mexican and American architectural features in the house. A tour of the gardens will emphasize the importation of plant materials from "home" (in New England) as Temple designed his garden retreat. At another time, the character of Llewellyn Bixby Sr. might speak to the purchase of Rancho Los Cerritos in 1930, and architect Kenneth Wing could speak to his assignment at the Rancho and the influence of popular architectural styles of the period. Workmen characters from all facets of the remodeling could speak to various points of remodeling, decorating, space use and re-construction, providing comparison and contrast of the old and new.

The theme of HOME also allows for a detailed exploration of daily life during the four time periods. Continued maintenance of Temple-era trees and restoration of the Cornell gardens, as well as treatment of room interiors, will allow comparison and contrast between the 1840s, 1870s and 1930s. With Visitor from the Past tours, characters may speak to daily lifestyles at the Rancho using the text of Adobe Days and Anne Bixby Chamberlain's letters as guides for numerous stories. Through the eyes of Ying and other immigrant employees of the Rancho, a second central theme, that of social and cultural diversity, can be viewed as they share ethnic patterns and preferences. Tenants between the 1890s and 1920s will speak to how they adapted the house and gardens to their needs; vegetables and chickens soon replaced Temple's ornamental shrubs. After all, the Rancho served as a home not only to the "family" but to these people as well.

The central interpretive theme "Home" is therefore inclusive of many areas, peoples and subjects. The house, formal gardens and museum collections provide physical evidence to support this theme. By utilizing these different avenues to the past within the context of a specified time period, visitors will realize where and how they and the community fit into the larger picture of the locality, region and nation.

Stories include:

- It Starts with Mud
- A Blend of Spanish and Yankee
- Home Life and Hospitality
- Family and Migration
- Home Again -- The Rancho Remodeled
- A Garden Oasis
- Welcome Home!

Land And Economic Growth

The land as a pastoral, agricultural and mineral resource shaped the lives of Rancho Los Cerritos residents and the developing community.

The 27,000-acre Rancho Los Cerritos, carved from Nieto's enormous land grant, provided vast resources and opportunities for economic growth and change. From the original pastoral environment inhabited by Native Americans in harmony with their surroundings, successive owners exploited the land for ranching operations, agriculture, and eventually townsite and city development. Today, the Rancho encompasses only 4.74 acres of land and is surrounded by urban development.

The evolution of the land and its' use over time was spurred by changing ownership, economic forces, access to water, mineral resources, and technological innovations, especially in the area of transportation. First cattle gave way to sheep as the Rancho's owners responded to environmental factors that decimated the cattle industry, and to expanding markets as the gold rush, Civil War and Americanization of California encouraged new economic initiatives. Later the railroad and population growth in southern California helped prompt further changes in land use, opening new avenues of prosperity for the Bixby family. As land was sold or leased, the Bixbys engaged in new economic ventures including large-scale farming, dairying and commercial development. The family companies diversified their businesses beginning as early as the 1870s, impacting growth and development in California and specifically in the greater Long Beach area. Jotham Bixby actively encouraged immigration to southern California, and Long Beach was founded on the southwest portion of the Rancho.

Over time, the fortunes of the Bixby family shrunk, and so did the boundaries of the Rancho. With Visitor from the Past characters representing later tenants such as the Ricketts, Rosales', and the Coronados, the theme of LAND AND ECONOMIC GROWTH allows for observations on the encroachment of Long Beach on the Rancho. Their stories would reflect the transition of the land from rural to urban use, the introduction of the red car and public utilities, and the impact of the Signal Hill oil discovery. These characters would

have much to share with regard to the economy of Southern California and their particular reason for living at the Rancho.

The gardens and barnyard areas will speak best to stories of economic change and land use, although certain period room exhibits may also contribute to this theme.

Stories include:
- Water: Liquid of Life
- Managing the Land
- Cow Hides and Woolybacks
- The Family Companies
- The Rancho Becomes a City
- A Pocket of Serenity

Social And Cultural Diversity

Owners, workers and guests at Rancho Los Cerritos reflected the social and cultural diversity of Southern California and made many contributions to the development of the area.

The Rancho, as part of California, was ruled by Spain, Mexico, and later the United States. Changes in ownership, as well as international trade, the gold rush and westward migration, introduced many new cultures to the region and rapidly destroyed the Native American way of life. Each of these new cultural groups brought certain customs and traditions that were reflected in their buildings, industries, forms of government, places of worship and personal lifestyles. Each contributed to the rich mix of today's multi-cultural, multi-ethnic society.

At Rancho Los Cerritos it was Native Americans who mixed the soil and molded the adobe blocks for the two-story adobe. Native Americans and Mexicans served as vaqueros, herding cattle first for their hides and tallow and later driving them north to feed the miners. Amongst those in Jotham Bixby's employ were Irishmen, Basques, Chinese, Portuguese, Mexicans and New Englanders. Mexican families again occupied the house as renters and boarders in the early 1900s; and others worked as servants for Llewellyn and Avis Bixby in the 1930s.

These new and old multi-ethnic populations helped transform the land and society as they worked at Rancho Los Cerritos and surrounding businesses. Visitor from the Past characters representing servants and ranch workers from each of the time periods will offer glimpses into their hopes and dreams, industries and successes. Owners, too, will represent the upper echelons of Mexican and New England society. Together, their stories will help visitors understand the melding of cultures and philosophies that has shaped our community and our State.

All three interpretive areas may be used to illustrate this theme.

Stories include:

- Patterns of Change (immigration/migration)
- They Worked the Land
- Lives of the Other Half
- A Blending of Cultures: the Immigrant Experience

INTERPRETIVE AREAS

The three working interpretive areas are: the Adobe, (the house); the Gardens, (both the formal garden to the east of the adobe, and the inner courtyard); and the proposed barns complex and barnyard area. Additional interpretation will take place at the entry and along the Arroyo, in the Visitor Center, and in the Native California Garden.

The three working interpretive areas are physically separate from one another but share the common thread of "home" in the interpretive theme. Each Visitor from the Past interpreter will present his or her own perspective of the site based upon the role portrayed. Visitors will hear one individual's story, and will be encouraged to return to Rancho Los Cerritos for tours with other characters in order to experience new "chapters" in the Rancho's history.

The Adobe: (Ranch House)

More than just a building, the historic adobe is the heart of the site. It was, and is, the common thread which runs through any stories told about Rancho Los Cerritos. The adobe is the context within which all members of the different families, workers, and family visitors operate, live their lives, and pass on the legacy to the next generation. Even during the Tenant Period, when no longer used by the "family," the adobe ranch house still provided the context for the stories of those who dwelt within its walls. Those individuals are a very real part of the site's history.

The interpretive approach to the house is that of a home. The many lives and families that lived within the house provide a library of resource material for the interpretive programs and scripts. "Visitor from the Past" interpreters will present these various stories to modern day visitors as they guide them through the house. The stories connected with the various rooms and aspects assist the touring public to put historic data into contextual family settings.

The Gardens

The Rancho's gardens are an important part of the site and an important part of the interpretive story. They represent at least two very distinct periods in the history of the site, two different priorities. These are the Temple period, when the garden was looked at from the perspective of experimentation, beauty, and perhaps even nostalgia, possessing plants of the east; and the Bixby/Cornell period, when the gardens demonstrated wealth and were designed for family living and beauty.

Servants can also discuss the small garden north of the kitchen, although construction of the barnyard will prevent its restoration. Likewise, while the gardens of the Tenant Period will

not be restored, tenant-era characters can share stories of when the gardens were utilized to grow crops and provide grazing space for livestock. This will provide a sharp contrast and comparison to previous and later periods.

The gardens and the grounds are an interpretive experience that may be enjoyed on garden-only tours, as a self-guided adventure, or as part of one of the Visitor from the Past tours. The interpretation may focus on regional and cultural connections, lifestyles, and changes brought about by economics, commerce, weather, and land development. Additionally, environmental issues of climate, water, change, land development and use of the Rancho and the surrounding area may be addressed through garden and grounds tours and museum publications.

The Barns Complex and Barnyard

Reconstruction of the 19th century barns complex with its barn, sheds, corrals and barnyard, is a critical component of the Master Plan. The outdoor area will support the 1860/70s storyline with its physical appearance, furnishings and activities, and the indoor space will provide a much needed modern assembly room for lectures, workshops, films, temporary exhibits, community groups and special events.

The barnyard, in particular, will provide space and support for the existing school program and for special events. Hands-on school activities such as clothes washing, candle making, leather tooling and croquet will take place in this area, and the current "activity area" in the formal gardens will be restored to reflect Cornell's designs. Large events that include educational hands-on activities and/or demonstrations will also utilize this open space to accommodate crowds. Animal pens in this area are for special event activities, but could also be used in one-day educational programs where bringing in a sheep or cow is incorporated into lessons on ranching.

OVERVIEW OF PRIMARY INTERPRETIVE EXPERIENCE:

The general public will park on site in the Forecourt, or drop passengers off in front of the Visitor Center and park on Virginia Road. For visitors walking up the drive from Virginia Road, interpretive signage along the arroyo pathway will provide information on the Native Americans who once occupied Rancho lands. This signage could also include a chronological timeline to help visitors understand the site's place in history, from Native American times through the present, using recognized world, national and local events to further expand and illustrate the context of the Rancho.

The Master Plan calls for the reconstruction of the old Cota Adobe, a circa 1834 adobe, for use as the new Visitor Center. All visitors to the site will arrive here for the following visitor services: an orientation video in the video room, interpretive exhibits in the gallery, and the Museum Gift Shop. Public restrooms will be available adjacent to the Visitor Center.

The orientation program should be about 7-12 minutes long and will provide context for the living history tours. A longer version of the video may be used to inform off-site groups and potential donors about the specific purpose and significance of the site. The video should also be incorporated into Educational Trunks with supporting reproduction documents for use in outreach programs to schools or other institutions. The full-length video should also be made available for sale in the Museum Gift Shop.

On any given day, visitors will select from one of several guided tours with a Visitor from the Past. Interpreters will assume the roles of owners or workers from each of the key time periods and their tours will provide visitors with one chapter of the site's history. Pre-1930s characters will take visitors through the main courtyard gates to begin their tour by the foreman's room. Characters from the 1930s and 1940s will use the 1930s entrance as the starting point for their tours.

Tours will proceed through those rooms and interpretive areas appropriate to the character and his or her interpretive themes. For instance, the 1930s gardener will spend most of his time in the gardens and in the North Wing work areas; the Chinese cook will focus on areas relevant to his domain: storerooms, the kitchen, dining rooms and barnyard. Interpreters will weave stories based on historic themes, their characters, room exhibits and the buildings and grounds, illuminating the past and emphasizing issues relevant to modern times. Although "from an earlier time," interpreters will be able to acknowledge modern changes and, if appropriate, comment on use of space, lifestyle and furnishings to provide comparison and contrast for the visitor. Throughout the tours, interpreters will seek to engage visitors in discussion and thought.

Each tour will utilize the three main interpretive areas in different patterns as it focuses on only a chapter of the entire story. All three areas relate back to the central theme of "home" in some aspect, and viewed together they give a clear picture of what the Rancho "home" was like for every individual throughout the four time periods. Collectively they also provide insight into how Rancho Los Cerritos "made Long Beach." The separate stories

from each of the time periods, interwoven, provide perceptions of a home and land in transition through contrast and comparison.

At the end of each tour, visitors will have the option to sign on for a second tour, browse the Visitor Center exhibits and Museum Gift Shop, explore the formal gardens and grounds, or enjoy a picnic lunch from home before departing the site.

Arrival

The interpretive story begins even before the visitor arrives at the Rancho. Because of the Virginia Country Club, Virginia Road has a rural feeling once one leaves behind the houses and begins to bisect the golf course. While there is no possible way to reassemble the Rancho's once vast acreage to provide a true sense of its ranching past, this rural feeling helps visitors "decompress" as they leave behind the urban environment.

With the cooperation of the Virginia Country Club and the City of Long Beach, this plan calls for the erection of tasteful markers to inform visitors that they are approaching Rancho Los Cerritos. These markers will include the Rancho's name, "Gateway to the Past," and gate logo. Together with the rural roadway, they will create a sense of anticipation and expectation for visitors.

Upon entering the Rancho proper, a feeling of welcome and arrival should be established. This may be partially accomplished with proper signage and directions to the on-site parking lot and to the Visitor Center. For those walking up from Virginia Road, low interpretive signage along the west side of the driveway and overlooking the arroyo will help them place themselves in the time and context of the site. In particular the arroyo supports the very early history of the site; signage will serve to inform the public of the site's prehistory and natural history.

Orientation signage should also be considered in the Forecourt area, for those parking on-site.

A point of transition is provided by the landscaped "staging area" around the Visitor Center. This area allows change between the "modern or present day," and "the time periods of the site." Here visitors can continue to "decompress" and gather information necessary for their journeys to the past. Docents can use this area to welcome large groups and introduce them to their tour options.

Interpretive signage in this area should continue the story begun with the entryway signage and flow into the storyline that will be shared in the Visitor Center. Information on the early Spanish Land grants, residents, government and politics will be helpful to the visitor prior to entry into the Visitor Center. Introduction of specific "characters" of the Rancho will prepare the visitor for a "Visitor from the Past" interpretive tour and create the sense of "home," the main interpretive theme. Signage should also answer questions regarding restrooms, phones and gift shop information.

When visitors have the opportunity to experience a "Visitor from the Past" interpretive tour, they will have background knowledge and anticipate meeting with an "old friend." Through stories, this "friend" will open a gate to the Rancho's past.

The Visitor Center

The proposed new structure is extremely important to the new Interpretive Plan. The Visitor Center, based on the 1830s Cota adobe, will serve as a transitioning point for the site. In addition, it will house the Museum Gift Shop, a video room, changing exhibit gallery space and restrooms, and will serve as the orientation center for all visitors.

Visitors will be able to view a 7-12 minute video presenting a brief overview of the history of the site; all visitors should be encouraged to see this video.

A suggestion for the video would be to have characters from each time period identify their relationship to the Rancho's history. For instance, Manuel Nieto might speak about the early history, Temple about cattle ranching and changes in government, etc., each providing a personal link to the site. In this manner the visitor receives and processes the information, and is better able to identify characters in the "welcome to our home" manner of the interpretive theme.

Changing exhibits in the gallery space could be coordinated with the interpretive tours and characters. At other times, this space might be used to showcase museum collections or focus on contemporary issues as they relate to Rancho history. For example, the museum might offer an interpretive exhibit on the dairy industry and its place in area history from the 1870s through the present. Within the exhibit text, historic characters should be re-introduced to the public, creating a firm communicative link between the public and the tour program.

An area with a "Who am I?" or "What am I?" interactive exhibit should also be in the Center. This area would provide additional support to the interpretive program and characters, interactively giving visitors insight into the Rancho's history. It could also introduce themes and subject areas via an interactive question and answer process, thereby furthering the communicative link. In addition this area could include an interactive timeline with removable pegs, allowing visitors to position their living history characters within the context of the site. Children especially enjoy finding out how long ago and how old something is. This pegboard allows them to interact with the timeline and measure time in a manner which is comprehensible to them.

Traffic flow should encourage the visitor to view the video first, then the exhibit areas, and finally to be directed to the area where tours are selected. Signage denoting descriptions and availability of various tours should be visible at the end of the exhibit. These tours would include living history tours and self-guided tours of the gardens and grounds, as well as any other tour formats being offered (i.e. if self-guided audio tours are introduced, etc.). A changeable sign, noting which tours and characters are available on a particular day, should

also be posted. It should state clearly the time frames and main themes of each particular tour.

Printed brochures advising the visitor about additional and future tours, as well as programs and events, need to be accessible so that a return visit can be planned and anticipated.
The Museum Gift Shop should continue to sell Adobe Days and general California history books, logo items such as the Rancho's Temple brand mugs and notecards, gifts from the garden's bounty (currently produced through the creative efforts of the horticulturist and Garden Committee volunteers), and quality souvenirs that relate to the museum's mission. Eventually the Rancho will want to produce and share scholarly research on the history of Rancho Los Cerritos, selling publications through the Museum Gift Shop. With this aim, staff should work with scholars and students to encourage greater use of the site's California History Research Library and Archives.

Tours of the Adobe

Once an interpretive tour has been selected, visitors will be directed to the designated entry point for the start of the tour. The main entry point for most tours will be the gate at the entrance to the inner courtyard. This was the original entrance to the Rancho, and provides a smooth tour flow to the wings and two-story portion of the house. However, 20th century figures will most likely bring their visitors in through the orchard and formal gardens into the central door on the east side of the house; the gardens served as the main entrance after 1930.

Visitors should be directed to the courtyard gates or, if appropriate, through the orchard to the garden gate, where they will be met by their historic character. Once encountered, the character must establish several points:

- First, from his or her own perspective, provide a brief synopsis of the Rancho's history, beginning with the early period of Manuel Nieto and ending with the 1930s period. Even early characters can do this, as they are in fact "Visitors from the Past."
- Second, the character needs to explain that once the public passes through the gates they are in a 1930s courtyard or garden, and that early in the history of the Rancho it would not have looked as it does now. This is the first comparison and contrast presented by the characters.

The interpreter will then take visitors throughout applicable portions of the three interpretive areas as he or she conducts the tour, and will recount the storyline for their time period. Each room or area operates as a "scene" of home to those who lived and worked at the Rancho throughout the history of the site, and respectively, each reflects the different historic periods of the rancho from a variety of economic and social levels. Interpretively, each room or area also has a specific objective that will vary from period to period as the character establishes his or her period link to calling the Rancho "home."

In addition, as a "Visitor from the Past," alterations from the 1930s remodel will be evident and may be commented upon in order to provide necessary information to discuss contrast

and comparison issues. With their storyline defining the parameters for their responses, the historic characters can easily transcend the time difference to answer questions.

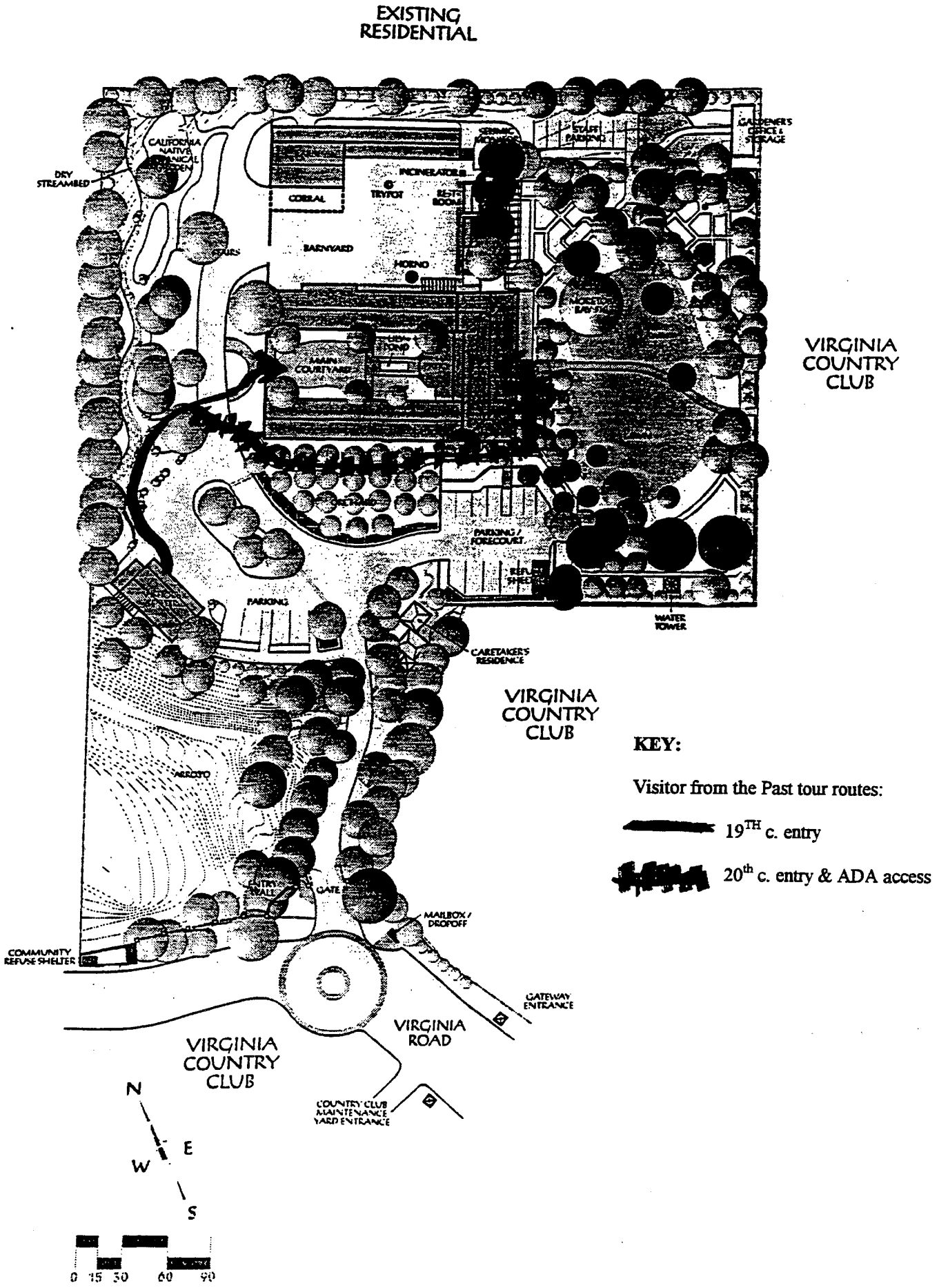
An example: *A servant from the early Bixby period may be conducting the tour. When in the "modern" living room, questions will surely be asked. The character may explain how the 1860's parlor appeared and then lead the public into deductive reasoning and conclusions by commenting on the use of space, change of lifestyle, etc. These comments can be made using common sense, and not going into a dissertation of change and transition.*

Once through the gates and into the inner courtyard (or garden), the visitor is ready to experience the past by entering and exiting the various rooms in the North, East, and South wings. Each room, as previously stated, serves an interpretive objective, a segment of the Los Cerritos story. The final destination for tours with 19th century characters is the main house (East wing), where the time is split between the 1870s and 1930s. (20th century characters will start in the East wing and go through select rooms in the North and South wings.) With characters representing each time period, all of the years may be adequately covered so that the bulk of the Interpretive Plan does not rest mainly in any one era.

Tour Completion

House tours will exit into the formal gardens or into the barnyard area, depending upon which character and which rooms are visited as part of the storyline. Interpretation of these areas by the historic character may or may not be incorporated into the storyline. If they are not, the visitor could be offered the choice of exploring the area with a self-guided tour brochure or returning with the guide to the Visitor Center and, eventually, exploring other areas on the grounds or exiting the site.

Leaving intact a number of current room settings and refurbishing the upstairs to reflect the 1930s, the current interpretive program will be more easily modified. This will make the transition into the living history tours much easier. The program is flexible and allows for the gradual introduction of "Visitor from the Past" interpreters; new characters will be developed and added as research, time and resources permit.



Proposed Master Plan

Rancho Los Cerritos Master Plan

PROPOSED ROOM TREATMENTS

The following is a proposed treatment of the rooms in the North, South and East wings (see floor plans following page 25). These suggestions maintain the sense of "home" at the Rancho. Since this is the most important part of the overall interpretive theme, it is important to do everything to enhance this feeling.

This treatment distributes the emphasis on the 1930s and 1870s more evenly and allows for stories from the Tenant Period and the Temple Period to be more easily interwoven. It maintains for the most part the rooms in their original position, thereby once again supporting the feeling of "home." It provides a unique opportunity to transition between the 1870s and the 1930s through the use of a scrim and theatrical lighting in the parlor/living room area.

In addition, the current collections are primarily supportive of the 1870s period, and it is logical to use as many of these artifacts as possible. The suggested room treatments allow for such usage. Most importantly, the program and room treatments allow for change, flexibility, and growth over time with additional research and resources to be added as the need arises.

The South Wing

Rm.101	FOREMAN'S ROOM	Refurbished as the foreman's room from the 1844-1866 period
Rm.102	LAUNDRY	Through exhibit techniques, conceal 1930s dark room furnishings and establish the laundry room described in Adobe Days, ca. 1870s
Rm.103	MEN'S DINING ROOM	Interpret to reflect ranch hand's dining room in the 1860s/70s, with dirt floor (bathroom not open to public)
Rm.104	HALL/PASSAGE	Retain as is
Rm.105	STORAGE ROOM	Furnish primarily as a food storage area with some furniture, from the 1860s-70s, add "dirt" floor
Rm.106	BLACKSMITH SHOP	Retain furnished as is; expand "dirt" floor to cover wooden entry to extent possible
Rm.107	BEDROOM	Furnish to reflect an adult's bedroom from the 1860s-'70s period (bathroom not open to public)

The East Wing

Rm.108	LIBRARY	Retain and furbish as a 1930s family library, removing current Long Beach Public Library collection to new barns complex
Rm.109	SUNPORCH	Remains as 1930s sunporch[2]
Rm.110	LIVING ROOM	Remove current false ceiling and wall, and furnish as transition room to 1930. The room would be opened up to the dimensions of the 1930 Living Room, and the rear of the room would be furnished with step ladders, scaffolding, etc. to give the appearance of transition. The existing 1870s parlor furnishings would be left in place, and the two areas would be divided by scrim. For pre-1930s interpretations, this scrim would disguise the rear of the room; for post 1930s interpretations the scrim would be back-lit to reveal the space and flurry of remodel activities
Rm. 111	PASSAGE	Remains as is; establish 1870s exhibit under staircase per Adobe Days
Rms. 112 & 113	PASSAGE & TOILET ROOM	Remain as is; toilet for non-public use only
Rm.114	DINING ROOM	Retain as 1860s/70s dining room
	LOWER VERANDAS	Furnish on east side with 1930s furnishings per family and photographic evidence; do not add outdoor furnishings on west side

Upstairs (East Wing)

[If the public is unable to climb the stairs,(see ADA section) a "Visitor from the Past" may address the upstairs from the Hall or Living Room/Parlor. The museum currently offers visitors a detailed photo album with interpretive text that describes the upstairs; this should be updated when the upstairs restoration occurs.]

As furnishings are acquired, the upstairs rooms in the East wing will eventually be furnished to reflect Llewellyn and Avis Bixby, Sr.'s residency in the adobe in the 1930s.

[2] Sunporch Options: The sunporch may be left devoid of furnishings, or may be restored to reflect the 1930s photograph in the Rancho's collections. Staff has concerns that the furnished sunporch will disrupt the interpretive program, as characters must use this room as a passageway and their stories may not lend themselves to dealing with a 1930s room. These two options should be carefully considered once the interpretive program is in place, and before a final decision to furnish the room is reached.

Areas 201-202	PASSAGE WAYS	Restore to 1930s, reinstall light switches, intercom system, heating controls. The upstairs doorway between the hall and living room will be unlocked for access and interpretive programming by tenant-era and post 1930 characters.
Rm. 203	IRONING/SEWING ROOM	Restore to 1930s use/appearance for interpretive purposes
Rm. 204	TOILET ROOM	Restore to 1930s appearance for interpretive purposes
Rm. 205	MASTER BEDROOM	Restore as Llewellyn and Avis Bixby's bedroom in the 1930s
Rm. 206	SLEEPING PORCH	Restore to 1930s and interpret
Rms. 207-210	DRESSING ROOMS, HALL & BATHROOM	Restore to 1930s and interpret
	VERANDA	Consider furnishing with a few chairs for interpreter use

The veranda is a space available to characters of all four time periods, and will allow interpreters to talk about the gardens as well as discuss their use of the veranda over time. This may be the strongest area for interpretation by Tenant-era characters, whose living quarters were only in the East wing. Unless a room is specifically furnished to their time period, and this is not foreseen, much of their focus will reflect their use of the 1870s dining room and parlor areas and changes to the upstairs.

The North Wing

Rm.115	BREAKFAST ROOM	Furnish to the 1930s
Rms. 116 & 118	KITCHEN	Retain, re-open into the Butler's Pantry, and furnish both rooms to reflect the 1930s kitchen
Rm.119	HALLWAY	Reconstruct wall between rooms 119 and 121; leave hallway as "neutral" passageway
Rm. 121	KITCHEN	Furnish as an exhibit display of an 1870s kitchen
Rm.122	SERVANT'S ROOM	Furnish to represent Ying and Fan's room in the 1870s
Rm.123	SERVANT'S ROOM	Furnish to represent a maid's room of the 1930s
Rm. 124	BATHROOM	Restore to 1930s for interpretive purposes
Rm.125	SHOP	Furnish to represent a 1930 workshop with mechanic's tools, home repair needs, camping and golf storage
Rm. 126	GARAGE	Remove wall between corridor and current "Visitor Center." Leave carpeting; reopen the ceiling and walls to expose the rafters and adobe. Use as a modern classroom space for groups. ADA access via a lift will be available between Room 125 and 126.

Rm. 127		Non-public area; leave as is and use for storage for classroom supplies, etc.
Rms. 128 & 130	MILK ROOM	Remove wall between rooms (installed 1987). Establish as milk room of 1870s per Adobe Days. Enter only through door 49 on north side of building.
Rm. 129	TOILET	Leave as is; non-public use only

All of these areas possess wonderful opportunities for "Rancho Los Cerritos: Gateway to the Past." Stories would include the recollections of characters such as members of the Temple and Bixby families, ranch hands, cooks, gardeners, residents of the Tenant Period, architects, designers, and landscapers from the Bixby/Cornell Period, and a multitude of guests and visitors who passed through the gates and over the threshold during all time periods.

With the variety of room treatments, stories from different time periods can be reflected by a single storyline told by one character. As the character speaks to his or her own time period, the contrast and comparisons made evident by the story will cover a number of years in history.

Transitional rooms will assist in comparison and contrast of lifestyles, priority use of space, and cultural diversity. These rooms will strengthen the stories that are not represented by material culture.

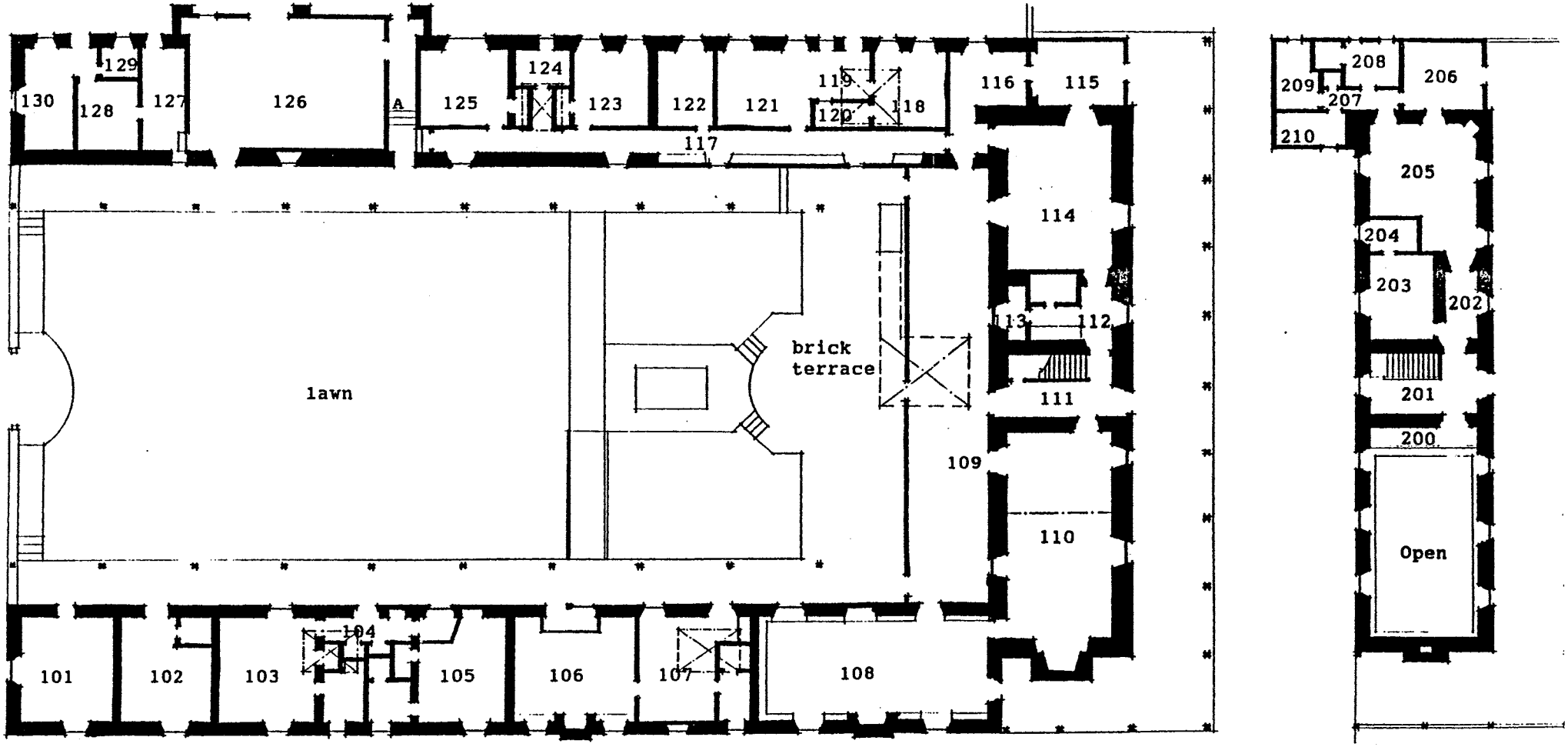
Example: *The Living Room/Parlor provides a visible example. This room, opened to its 1930s size and configuration, will contain the original 1870s parlor without the current false ceiling and wall. A theatrical scrim will hang where there was once a wall dividing the space into two rooms. On the far side of the scrim, towards the fireplace, the 1930s Living Room will be set up. Until appropriate 1930 furnishings can be acquired, a step ladder, paint and wallpaper tools, etc. may be seen along with 1930's wallpaper, upholstery and carpet or rug samples to give the room an "in - transition look--" just as it would have had during the 1930s remodel. Depending upon the character leading the tour, for example Llewellyn Bixby, Sr., entrance into the Living Room could be from the Library. An earlier character would enter the Parlor off the central hallway. Either way, the other side will be visible behind the scrim when back-lit at the discretion of the character.*

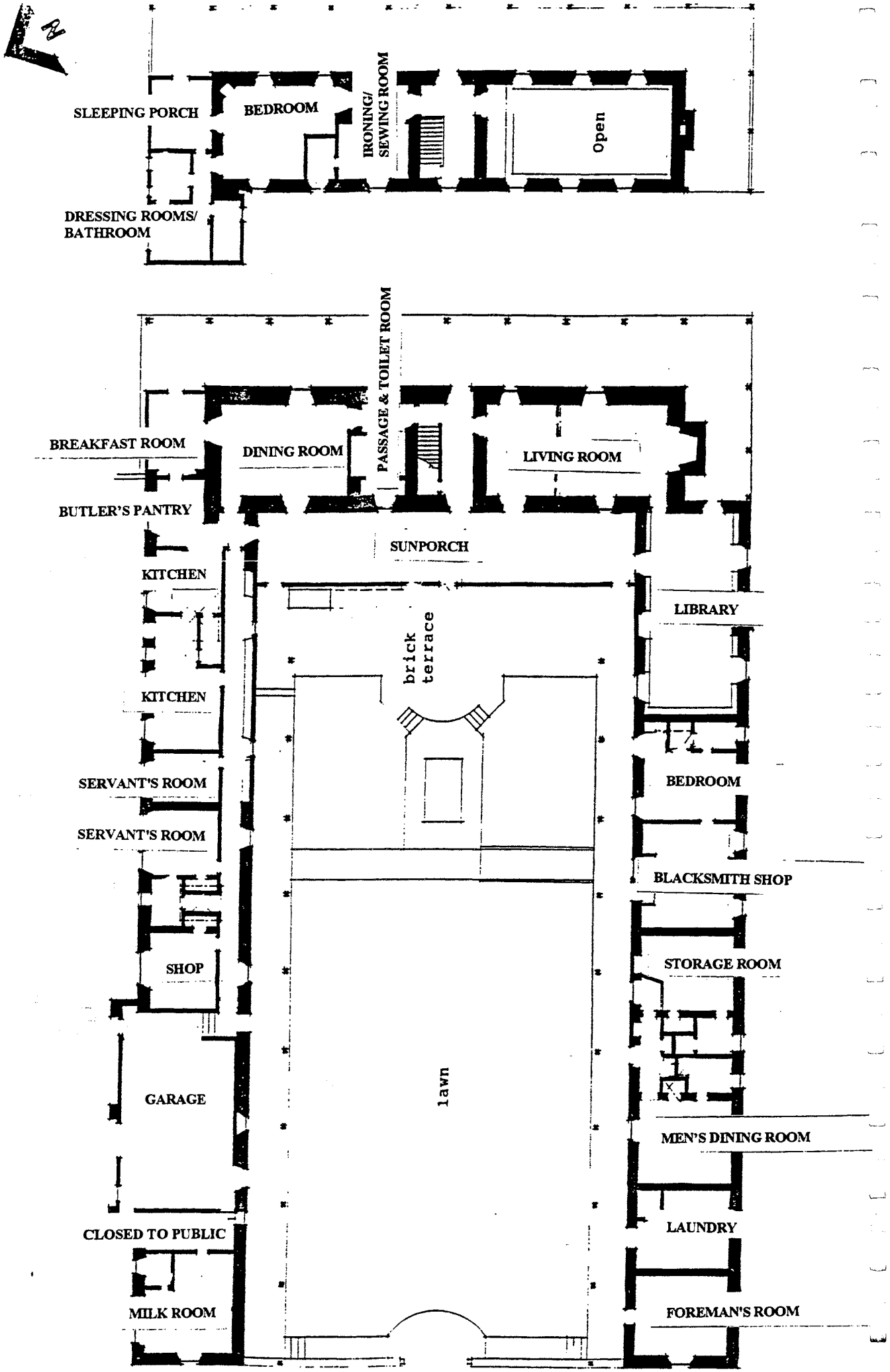
This allows for comparison and contrast and the concept of transition to be emphasized – the size and use of the original parlor in comparison to the 1930s renovation.

Specific tours can also be designed to highlight and enhance different aspects of the Rancho. A few examples include: ethnic and cultural differences, labor, domestic arts and change, economic change and land development, and prominent people of Southern California.

RANCHO LOS CERRITOS: GATEWAY TO THE PAST

Proposed Room Uses





PROPOSED ROOM USES

ADA RECOMMENDATIONS

The proposed ADA access and traffic flow routes should not inhibit the tours as long as extra time is allowed for moving of individuals.

However, traffic flow will be altered for disabled visitors bound to wheelchairs. In such cases, and regardless of the historic character, the tour will need to enter the adobe and gardens through the 1930s front entry. Interpreters must always keep these special visitors within their sight line; this may necessitate placement of disabled individuals first in the interpretive area before they gather the rest of the group about them. The disabled should be the first consideration when speaking.

Visitors in wheel chairs, on crutches, or who are very elderly will not be able to visit the upstairs rooms. If relevant to their character, interpreters should prepare a short synopsis of their upstairs talk and present it to these visitors downstairs. In addition, staff should update the "upstairs tour guide" to permit visitors to see what the upstairs rooms look like.

TOURS

Tour Size

Tour groups vary in size; however, due to the small size of rooms in the adobe, the ideal group size for a house tour is 10-12. School groups with young children may have 15 students per tour. Likewise, garden tours should have no more than 15 so that visitors can hear the interpreter. The barnyard area can accommodate larger groups of 20-25 per interpreter.

Workshops comfortably can handle 20 - 25. Lectures will hold as many as the room will comfortably accommodate.

Tour Frequency

Self-guided tours - offered daily
Self-guided tours of the main garden and barnyard area could be available on a daily basis. These would require interpretive maps and brochures which contain factual data (dates, significant plant names, etc.) and social information (people, culture). To safeguard historic collections and avoid interruption of character tours, self-guided tours of the house should never be permitted.

Visitor from the Past tours - offered daily
Initially, a selection of two or three different "Visitor from the Past" tours should be offered on a daily basis during public hours. These numbers can expand as the program matures. Depending upon staffing resources and popularity, tours may be offered on the hour or on the half hour. Characters should be varied week by week or month by month in order to offer new program options to returning visitors.

Theme Tours – third person; offered as resources permit and by appointment
Third person guided tours should focus on specific themes such as comparison/contrast and architecture. These may be offered as a daily alternative, or by appointment.

CHARACTERS

The large number of individuals who called the Rancho "home" provide a wide variety of characters available for the Visitor to the Past program. These individuals include servants, ranch hands, family, relatives and guests, tenants, delivery people, gardeners, designers and construction workers. The use of composite characters is also possible; these characters never existed but are rather a "composite" of research from many different individuals. Composite characters are used when insufficient research is available on an important historic figure (i.e. a vaquero or the Chinese cook), and to represent a specific interpretive objective of the storyline.

Sample Characters/Stories
The following are some examples of possible stories for this interpretive plan, and are based on the three main themes. Stories could be rotated on a weekly or monthly basis, and changed to fit seasonal activities and events.

Temple Period:

Vaquero - An employee of the working rancho speaking about the cattle, water situation, and life in the region.

Native American - An Indian who has been hired to construct the adobe ranch house. He can speak of the architecture and the process of building, changes in land use and human subsistence.

John Temple – Builder of the current adobe, Temple could speak of his purchase of the Rancho, his dual citizenship, and his other business affairs; as well as round-ups and experiences during the Mexican-American War.

Visitors to the Temples - Characters portraying visitors from Los Angeles may speak of the beauty of the gardens and the significance of such gardens, the hide and tallow trade, early California life, religion and politics. Visitors from other parts of the country or world can compare lifestyles, architecture, economies, plant materials and climate, etc.

Servants/Employees of the Temples - Characters would talk about the climate, the need to water, the use of the garden's bounty, i.e. flowers, kitchen garden. They could also discuss the annual round-ups and fiestas.

Bixby Period:

Jotham Bixby – Manager and part-owner of the Rancho, Jotham Bixby could talk of the climate changes which caused Temple to sell the Rancho and what brought him to California.

A Bixby Brother - A brother of the Jotham's could talk about business affairs of Flint, Bixby & Co., the economy, and family get-togethers at Rancho Los Cerritos.

William Willmore - Mr. Willmore could speak of his unsuccessful attempts to establish a town in his name; then he could make observations on the later development of Long Beach.

Immigrant Characters - Characters representing kitchen, ranch hands, or gardeners talk about garden use and areas where they lived or worked, food comparisons and contrasts, lifestyle contrasts, etc.

Juan Canedo – A ranch hand who worked for both Temple and Bixby, he could discuss changes that occurred with the change in ownership – cattle to sheep, Mexican customs to New England influences, etc.

Family Members - Characters representing family members can talk about the bringing of plants from the east, climate conditions and native plants.

Tenant Period:

Residents- Those individuals who called the Rancho "home" could speak of economic/technological developments in the area, the urbanization of the Rancho, and regional and cultural change.

Manuel Liera – Liera could speaking about the Virginia Country Club and his employment with that institution, reflecting on when he lived at the Rancho.

Ramona Lopez – Lopez could describe her time at the Rancho, her boarders, the condition of the adobe, and the local economy.

Residents during the Tenant Period - Characters could speak about planting crops in the gardens and using the gardens for raising chickens and pigs.

Bixby/Cornell Period:

Architect Kenneth Wing - Working for Mr. Bixby, Wing could speak to the architectural style and changes he made in the house.

Interior Decorator – This character could describe working with Mrs. Bixby to select furniture, drapes, rugs etc. (culture and value)

Family/Friends –Family or friends of the Bixbys could speak about social functions at the Rancho and seasonal parties such as Christmas, Easter, etc. They might also discuss local politics, the economy and other current events.

Groundskeepers of the Bixbys - Characters would talk about use of the gardens for social functions and games; also of maintenance needs.

Ralph D. Cornell – Cornell would speak about the design of the gardens and their relationship to the house, as well as the history of the previous gardens and the attempt to keep some of that history intact. He could also speak to the use of native or regional plants.

SECONDARY INTERPRETIVE TREATMENTS

Additional alternative tours include an abbreviated tour of the house and grounds, giving visitors a third-person "sample" tour to inform them of what the site is about and the many complex, fascinating and educational stories and opportunities provided by the site.

Special theme tours are another option. For instance, an "Architecture and the Land" tour would focus on the construction of the adobe, changes during the different periods, and changes and designs in the gardens. These tours could be done in third person or first-person, with a 1930s architect/landscaper and/or a Native American who helped build the original adobe house.

"The Working Rancho" is another theme tour that can be developed as either a first-or third-person tour. This would concentrate on the barn/corral areas and the businesses of both Temple and Bixby in the 19th century, cattle versus sheep, climate changes, economic changes, and even land development.

Audio tours are another option, although technical difficulties with audio tours are always a consideration. New technology has eliminated most technical problems but has also increased the cost. An audio tour would allow the listener several options to choose from such as Factual Data, Social History, Folklore, and Horticulture. This option is the least preferred.

A special interactive interpretive area in the barnyard area might also be included for all visitors to explore at their leisure following, or instead of, a tour. The interactive interpretive area should deal with the "working" Rancho of the Temple/Bixby period. In addition to a permanent adobe pit area for viewing, harness, saddles, and the other paraphernalia used in the "daily" workings of the rancho could be available for the public to touch, handle, and try their hand at, i.e. harness rigging, saddles, rope handling etc. Perhaps some of these exhibits could be built into the sides of the sheds, with barn doors that close for security reasons.

FORMAL EDUCATION PROGRAMS

Adobe Days Revisited

The proposed Interpretive Plan allows the existing 4th grade school program, *Adobe Days Revisited*, to continue with some modifications. These modifications include the use of the North wing classroom as an orientation area and for the current "library component;" moving of all hands-on activities and games to the barnyard area; and the elimination of upstairs bedrooms from the tour. However, children will be able to go upstairs to the veranda area to discuss upstairs architecture and the gardens; and several rooms in the North wing will become available for the guided house tour component.

The house tour would begin at the courtyard gates and proceed up the South wing, skip the Library, enter the "Half Parlor" and Dining Room, go upstairs to the veranda, and then visit the 1870s Kitchen and possibly Ying's room. Concluding options might be to proceed to the

Milk Room from the barnyard side. Chores would take place in the barnyard and, in addition to current activities such as butter churning and tin punch, cooking, weighing of wool, working with plants or learning how to harness a horse could be added to the program.

Additional Programs, K-12

The goals of the History and Social Science Content Standards for the LBUSD are to promote lifelong learning, critical thinking, informed decision making and respect for cultural diversity in all students to ensure participation as active, productive citizens in a democratic society.

The following standards are especially relevant to the stories of Rancho Los Cerritos:[3]

- Sociology *(Students observe, analyze and interpret human behaviors and relationships to acquire a better understanding of self and others while developing communication skills.)*
- Historical Perspective *(Students understand the sequential and chronological nature of history, recognize that conditions and events are subject to individual interpretation, and consider the meaning as a guide to current and future decisions.)*
- Cultural Anthropology *(Students develop awareness of, respect for, and understanding of, cultural diversity and belief systems on local, national, and global levels. Students assess their relationship to their social system.)*
- Relationship of Geography to Human Activity *(Students recognize the impact of geography on culture, history, political systems, economic systems and the environment through the study of the five themes of Geography – location, place, regions, movement and human environmental interaction.)*
- Macro and Micro Economics *(Students understand a variety of economic systems and their impact on consumers, trade, commerce and national and international policies.)*

A few examples of possible curriculum links include:

<u>Continuity and Change—third grade curriculum</u>
Because a number of rooms provide for "comparison and contrasts," a tour and program could be developed to demonstrate changes in lifestyle, needs, space use priorities, cultures and land use. This would allow students to learn about legacy and lifestyles of people who lived long ago, prompting them to begin to think about continuity and change in their own lives and community. Information on the Tongva Indians and the various immigrant groups who peopled the Rancho, use of time lines and maps, and discussions of the land and natural resources, would specifically coincide with curriculum objectives for this grade level.

[3] History–Social Science content Standards: The Benchmarks. Unit I. Published by the Office of Curriculum and Instructional Resources, Long Beach Unified School District, 1995, under the supervision of Linda Mehlbrech, History/Social Science Curriculum Leader.

United States History and Geography—fifth grade curriculum
Goals for fifth grade students include introducing them to the history of westward expansion and helping them link past to present. Programs could focus on the migrations of Temple, the Bixbys and Rancho workers to California and Rancho Los Cerritos in the 19th century. Students could also focus on the impact of the Mexican-American and Civil Wars on government, exploration, colonization and expansion. Maps, diaries and environmental factors would be important to this study.

Impact of the Civil War—8th grade
Focusing on the beliefs of Reverend Hathaway and his children, students could explore issues of slavery and the Civil War, as well as their affect on political, economic and social change in the 19th century.

California Immigration—8th grade
The many cultures represented at the Rancho provide rich opportunities to explore the diverse lifestyles and contributions of Americans, Mexicans, Asians, Europeans and Native Americans to our State.

Long Beach Women in History—11th grade
A study of Long Beach Women in History could include learning about Bixby women such as Margaret Bixby, the "Mother of Long Beach" and founder of the First Congregational Church and Long Beach's first reading room; Fanny Bixby Spencer, Long Beach's first policewoman and a social worker and pacifist; and author Sarah Bixby Smith. Martha Hathaway's views on temperance and the Hathaway family's beliefs in abolition and education contribute to an understanding of social changes in women's lives in the 19th and early 20th centuries; one that could be compared to women's struggles for equal rights in the 1960s and '70s.

Relationship of Geography to Human Activity—high school level
The Rancho could design a program highlighting changes in land use and peoples' relationship to the land over time to encourage students to understand the impact of geography on culture, history, political systems, economic systems and the environment.

Additional programs could be built around:
- understanding operations and self-sufficiency of a working ranch or farm;
- lifeways programs which explore the making of cloth from wool, preparation of meals, or even include overnights to allow for a "day in the life of" theme;
- Native American habitation of the area prior to 1769;
- genealogical studies of the Bixbys as a model for understanding family histories;
- literary studies of Sarah Bixby Smith's and Fanny Bixby Spencer's books and poetry; and
- programs centered on the development of communities.

Programs for Middle School and High School students could also be organized around horticultural or environmental studies. Students could study plant life, study garden design,

or participate in a gardening program that demonstrates the changes in climate and the environment. This program would link nicely with a science and history curriculum in the schools. In addition, art and photography classes could take place at Rancho Los Cerritos, with students using the building and gardens as subject matter for their projects.

In conjunction with the development of new programs for grades K-12, Rancho staff should design Teacher Training Workshops and develop appropriate materials for classroom and teacher use.

College and University Level

Rancho staff should continue to encourage college-level internships, both paid and unpaid, to provide career development opportunities for students. Subjects such as History, Ethnic Studies, American Studies, Public History, Geography and Architecture lend themselves to specific research and writing projects. Theater Arts students could help develop characters and historical scripts, as well as serve as Visitor from the Past interpreters. Students in Teacher Training Programs could be encouraged to help develop new school program initiatives, as well as volunteer as school tour docents to gain experience working with children. The Rancho could also collaborate with the Art Department in creating new brochures and other published materials.

Faculty could also teach field classes at the Rancho on relevant topics such as architecture, landscape design and local and regional history.

The California History Research Library plays an important role in the development of Rancho Los Cerritos as a community and educational resource and will remain housed at the site, along with the museum's collection of archival documents and photographs. Faculty as well as students should be encouraged to use the library and archives to produce articles on local and California history, horticulture and antiques. Strong efforts should be made to publish new material in scholarly journals or in manuscript form, and publications could be sold through the Museum Gift Shop.

Adult and Continued Education Programs

Long Beach's Regional Occupational Program (ROP) provides the Rancho with opportunities to train adults in horticulture and landscape maintenance.

The Rancho's meeting room could be used for adult education classes.

FREQUENCY OF PROGRAMS

The frequency of a program will depend upon how well it is received by the audience. A lecture series may run for 3-6 months, with lectures occurring once a month. Seasonal programs tied to Autumn, Winter, Spring and Summer are also popular as each quarter of the year offers a different venue for activities.

Workshops tied to Christmas, Thanksgiving and other ethnic holidays are always popular with the public. Likewise children's' events such as a "Breakfast with St. Nick" or an Easter Egg Hunt, are popular and can be linked back to the overall interpretive theme of "home" and tied into known historical practices at the Rancho.

Documentation should be kept on each program. Pilot programs need to run at least three seasons. If by the third season the program has not grown or shows signs of weakening, it should be dropped. Conversely, if the program continues to grow, staff should expand it by adding something new each year and documenting changes and public reaction to those changes.

ADDITIONAL INTERPRETIVE PROGRAMS

Theater

The Rancho currently includes theatrical programs in its annual calendar of events. These have included one-woman performances, productions by the RLC (Rancho Los Cerritos) Players and formal Chautauquas in conjunction with the California Humanities Council. Additional theater presentations should be added so that the Rancho becomes known for exciting historical theater as well as its living history/theatrical tour program. Both the raised brick patio in the inner courtyard and the lawn area beneath the Moreton Bay Fig in the main garden provide lovely settings for outdoor theater.

The museum should continue to book quality, living history/theater performances, and may choose to work with interested volunteers or college theater programs to develop special plays related to the Rancho's stories. As mentioned above, the Rancho should also collaborate with college and university Theater Arts Departments to develop historical characters and costuming for its Visitor from the Past program.

Story Telling

For the same reasons as those for expanding theater offerings, Rancho staff should encourage programs centered on storytelling. This will enable the Rancho to share both family stories and Native American lore and to reach groups who may not be interested in a tour.

Changing Exhibits

A changing exhibit area should be available either in the new Visitor Center or in the Barns complex. As the exhibits change, special tours and activities could be composed to highlight various hidden elements of the Rancho or elements pertaining to current issues. These exhibits and added tours would enhance a visitor's understanding of the Rancho's history and help to place it within historical and modern-day context. Some examples include:

- An exhibit on the environment detailing the disposal of waste products, procurement of clean water, and population growth in the Temple period, as compared with those same issues in today's world. By examining how these issues were dealt with in Temple's period, changes that occurred as the population grew and the Bixbys purchased the Rancho, and how Long Beach currently deals with such problems, the visitor is made aware of how much history changes yet remains the same.
- An exhibit on immigration, discussing the many cultures represented through the Rancho's history and their numerous contributions to the development of our State, and examining changing attitudes towards immigrants, i.e. the Chinese Exclusion Act. This could be brought up to date with a look at recent attempts to stem the flow of immigration in California.
- An exhibit on the dairy industry. Beginning with Marcellus Bixby and his dairy cow operations, the exhibit would trace the establishment of dairy farms in the area once Rancho Los Cerritos ceased sheep ranching and began to lease and sell land. It would look at the Bixby family's dairying enterprises and the affects of hoof and mouth disease on the industry in the 1920s. Finally, it would examine the closure of Long Beach's last working dairy lands, behind Paul's Dairy, and look at the clash between agriculture and growth.

The new library reading room area should also include an exhibit case where new or significant books, archival materials and photographs can be showcased.

Demonstrations

Demonstrations are commonly included in major special events. The staff should consider scheduling volunteers to offer demonstrations on a daily basis, either in some of the rooms of the adobe or in the barnyard. These could include baking in the Horno and making adobe bricks in the barnyard, making cheese in the Milk Room, or ironing clothes with non-electric irons in the Laundry Room. Demonstrations can also be used to focus on specific cultural groups, i.e. to highlight aspects of Native American life, volunteers could demonstrate basket weaving, acorn preparation and cooking.

Outreach Programs

"Educational Trunks," programs loaded in suitcases or Rubbermaid boxes that cover specific learning material, are great outreach programs. The Rancho has currently developed one such traveling trunk as an alternative to its *Adobe Days Revisited* program. The development of additional trunks that can be used in classroom settings, or even at the

Rancho by families, should be considered. Each trunk might include a video or slide presentation (though cheaper to produce, slide projectors are increasingly scarce in the public schools), reproduction documents, artifacts and an instruction booklet for the teacher or user.

The Rancho might develop a series of Educational Trunks that represent a specific time period and/or character from the Rancho. Examples might be the Foreman from the Temple period, and the trunk would include samples of his clothing, a bedroll, a rope-making activity, maps of the Rancho, and a storyline that instructs and educates students to his life at the Rancho. Other cases can illustrate the lives of:

- **A Sheepherder from the Bixby Period,** with wool, carding tools, maps, clothing, tools for shearing, and a storyline.
- **Ramona Lopez, from the Tenant Period,** with sample recipes she cooked for boarders, a map of Long Beach, letters telling of visitors who stayed at the Rancho, and a ledger of expenses and revenue.
- **Avis Bixby, from the Bixby-Cornell Period,** with a list of social activities, letters, City Directory, clothing, and information on flowers and gardens.

Lectures and Workshops

The Rancho currently offers a series of lectures or workshops each year, usually based around a particular theme (i.e. conservation or horticulture). Once the barn is built, a permanent space will be available for larger lectures and workshops that can be offered year-round and during public tour hours and/or evening. The Rancho should continue to present quality programs on Rancho history, genealogy, horticulture, oral history, folklore, etc. Hands-on workshops, such as wool and weaving, flower etiquette and arranging, Native American folk art and crafts, and other period-related subjects should also be continued.

Youth Programs

Opportunities for quality educational programs geared for youth are numerous, and include Summer Workshops, a Junior Docent Program and Theater Workshops. Summer Workshops will help meet the community's need for both day care and affordable, quality programs. Utilizing the museum's many resources, they could focus on historical themes and the diverse cultures that helped build Southern California. Some ideas include:

- "From Ranchos to Cities" – a community's growth and evolution is examined, using Rancho Los Cerritos as an example of land use evolving from ranching to agriculture, and then to housing, industry and business.
- "Journeymen Days" – old-fashioned hands-on skills are learned when youth act as journeymen for different historic trades such as woodworking, blacksmithing, leather tooling, cooking and map making.
- "History Camp" – the Rancho could offer a week-long program exploring different periods of the Rancho's history on each day: Native American, Spanish, Mexican, American Expansion/Victorian Era and 20th Century.

TARGET AUDIENCES

The wide spectrum of interests offered by the "Gateway to the Past" program should appeal to all ages. Young children through Senior Citizens will find something to identify with in the Rancho's diverse programs. However, Rancho Los Cerritos should place priority on audience development as follows: school age children, families, local residents, youth, seniors, college students and tourists. It is the goal of the Master Plan to expand use of Rancho Los Cerritos and its resources, doubling annual attendance to 35,000, and reaching larger numbers through outreach programs.

School groups – The 4th grade school audience is well served with the current *Adobe Days Revisited* program; in fact, more than 180 classes are placed annually on a waiting list! Programs relating to the lower grades and grades 5 through 12 should be explored. This is a prime audience and important reason for public support of the Rancho.

Families – With increasing numbers of two-parent working families and/or one-parent families, parents are seeking quality programming opportunities that they can share with their children. The Rancho should continue to offer programs such as *Mud Mania!* for this group, and develop additional interactive programs and tour options that have parents and children exploring Rancho history together and at their own pace.

Local residents – The people of Long Beach need to feel "at home" at Rancho Los Cerritos. The recent MAP III survey indicated that, amongst those already familiar with the Rancho, the Rancho is a point of pride in the community. Programs should reinforce the local connection and encourage repeated use of the site by residents. Residents of Long Beach, Signal Hill, Lakewood, Paramount and Bellflower need to "come home" and discover their past.

Youth – In addition to formal school programs, the Rancho has an opportunity to offer youth programs at many levels. As mentioned earlier, some of these include: building communication skills through a Junior Docent Program; developing a Historical Theater Program for youth to study local history, write scripts and perform plays or character roles for the public; offering Summer History Camps for children under 13 that are both educational and presented in a safe environment; and training older youth to be counselors for the History Camps in order to build job skills. An introduction to career opportunities and the workplace is also offered through the Summer Youth Employment Training Program (SYETP).

The Long Beach community has identified youth services as an important issue. In 1998/99 it set goals to improve access to affordable, quality programs and services; increase participation and leadership by youth in service and program delivery; and develop a direct correlation between after-school, weekend and summer enrichment activities and LBUSD standards. This Interpretive Plan, along with efforts of a much-needed Education Curator, will enable the Rancho to be a valuable service provider in this arena.

Senior Citizens – This audience is often sophisticated, educated and highly skilled, and has much leisure time on its hands. The Rancho's many volunteer opportunities provide ways for seniors to continue their education, meet new people, and contribute back to the community. The Rancho should consider working with programs such as ElderHostel, OASIS, the Long Beach Senior Center or Senior Education programs at Long Beach City College and California State University, Long Beach. Bus tours should be encouraged, and Rancho staff might offer special incentives to tour groups such as a 1930's lawn party with cookies and lemonade (during the days of prohibition).

College Students – The Rancho is well positioned to provide career development opportunities for college students through internships and special projects. Students in many disciplines could perform much needed tasks while gaining work experience and building personal knowledge and skills. Both paid and unpaid internships should be encouraged, with arrangements for students to receive college credit for their projects.

Tourists – A cornerstone of Long Beach's renaissance is the tourist and convention industry. Although located at some distance from the bustling downtown area, *Heritage Tourism* is a major motivation in travel and the City should help market and encourage visits to Rancho Los Cerritos. In addition to showcasing an outstanding architectural treasure and serene gardens, visitors passing through the City will learn about Long Beach's role in the growth of Southern California – and they may "find a home" at the Rancho. Just as those travelers in bygone days found rest at the Rancho, today's' travelers should also be made welcome. When they leave they will take with them an appreciation of Long Beach's rich legacy, hopefully to tell others, and perhaps to return themselves.

STAFFING

Both the Mayor's Advisory Task Force and the National Endowment for the Humanities Self-Study Project noted the urgent need to add a full-time Education Curator to the current Rancho staff. This Interpretive Plan concurs with this recommendation. Improving the educational system and offering youth alternate opportunities to violence are important issues in the Long Beach community. The Education Curator is critical in order for the Rancho to develop its rich resources and establish itself as a major educational resource within the greater Long Beach community. The Education Curator's role would be to strengthen ties with the school district and colleges, explore collaborative efforts, and develop new educational programs for children, adults and families. This position should be filled with an experienced educator who has a particular interest and background in history.

The "Visitor from the Past Coordinator" may need to be a separate individual with special training and sensitivity towards history and theater. This individual should be hired once funding is secured for the Visitor Center, so that the Visitor from the Past program can be in place by the time the Center is completed and the South and East wings have been restored.

Volunteers will be encouraged to participate in Visitor from the Past tours. However, not all docents will be interested in assuming historic character roles; therefore, paid interpreters will be sought to augment the Visitor from the Past program. As another option, interpreters may be recruited from the local university on an intern basis with the Theater Arts and/or History Departments. This first-person program will require new training that will focus on character development, storytelling and theatrical techniques.

Since the program is initially designed to offer a minimum of two-to-three different character tours on any given day, with room for growth, a reliable staff of at least three paid, part-time interpreters will be needed. These may be actors with a willingness to be trained in the site's history, or individuals who are extroverted and possess good public speaking and conversational skills.[4] Successful examples of both exist. In Pittsburgh, there is a fine program based upon professional actors. Colonial Williamsburg and Plimouth Plantation prefer to hire outgoing individuals who are passionate about history and can be trained in theater techniques by their staff.

Rancho staff has already started to assemble "character notebooks" for key Rancho figures. This process should continue. While research is being compiled and organized, decisions on the selection of historic characters should be made, as the research will eventually need to be organized into scripted material for the "Visitor from the Past" interpreters. Once characters are selected for the initial program debut, character notebooks, information sheets outlining the program, tours, and other interpretive opportunities should be compiled and sent to

[4] For the recruitment of regular tour staff, Follin suggests that actors not be used because they tend to be too orientated toward a "center stage" performance. Instead, his experience has shown that an extrovert with conversational skills is believable, approachable, and far more interactive. Additionally, the pay scale for a non-actor will be lower than that of an actor.

docents and staff. An interpretive training program should be organized and dates for training set. Docents should have the opportunity to sign up for the various aspects of the interpretive program with which they feel comfortable.

The range of "characters" should be reviewed and evaluated, in addition to the length and subject area of the tours. Tours should not exceed one hour, and where possible, seating opportunities should be made available along the tour route. The time allotment for tours should be posted or stated in the Visitors Center at the outset of the tour so that visitors will be comfortable with their use of time.

The Rancho's volunteers, and especially the trained docents, are an integral part of the new interpretive program. Those who do not wish to participate in the Visitor from the Past tours will continue to operate the school program, provide third person theme tours, help with stationed tours, demonstrate crafts and assist with special events.

In addition, they may help develop tours for special audiences and select interest groups. Such tours would include tours for the physically or mentally disabled, hearing and sight impaired, foreign language groups and special topical groups. Additionally, theme tours that connect with existing school curricula should be developed, e.g. "a working Rancho" and "open land to private lawns"(social and economic development of Long Beach).

PHASING OF INTERPRETIVE PLAN

Phased implementation can sometimes be a long and tedious process undergoing a number of changes along the way. However, such phasing is often necessary for fiscal reasons. The effort needed to implement and direct the transition of an interpretive plan is enormous. It is often difficult to maintain enthusiasm, smooth the transitional "bumps," and staff untried programs and tours over a lengthy phasing process. While it would be best to make the transition rapidly, it is not feasible to do so at Rancho Los Cerritos.

Therefore, certain aspects of the Interpretive Plan should take priority when phasing the Master Plan.

First Priority

The Visitor Center is a first priority for implementation of this program. Without this vital segment, any effort to establish new tours, programs or characters will be pointless. Visitors need a proper orientation to the site, a Center where they can focus and become familiar with the Rancho's history and begin to place themselves within the context of what they are about to experience.

Once the Visitor Center is built, the current Visitor Center (garage) can be converted to a classroom.

Second Priority

The caretaker's apartment should be built next. Once completed, this will free up a good portion of the North wing. When this occurs, offices, storage areas and the workshop in the South wing should be moved into the old caretaker's space, freeing these areas for restoration and interpretation. The Archives area with its school program storage should also be moved, allowing staff to reopen the parlor/living room area and restore it as a transitional space. At this time the upstairs bedrooms should be changed to reflect 1930s room uses. However, the Sleeping Porch and closet areas will continue to be used for storage until the barns complex is built.

Once the first and second priorities are completed, "Rancho Los Cerritos: Gateway to the Past" with its Visitor from the Past tours can be inaugurated.

Third Priority

Improvements at the entry way and inclusion of interpretive signage on the approach to the Rancho and the Visitors Center should come next. This signage adds an extra dimension to the visitor's awareness level of the site.

Fourth Priority

Reconstruction of the barns complex and barnyard is the fourth priority. This space supports a number of important interpretive ideas and activities; additionally it provides physical space for offices so that remaining rooms in the adobe, currently used for offices and storage, may be restored for interpretive purposes.

More importantly the barnyard area will support a number of 1870s activities as well as animals for special events. Classroom space, essential for any additional programming, is also provided by this reconstruction. In short, this is an important area, but it can not take priority over the first two segments as reconstruction has some considerable cost and complex problems attached to it. The new interpretive program can function reasonably well without this element, which is not true with the first two priority segments.

Phasing the Interpretive Plan in several segments allows for additional staffing, collection procurement, relocation and alteration of space. Existing educational and special event programs can be maintained and new school/educational programs may be added. These new programs will only further enhance the transitional period and create a foundation for future programming once the interpretive plan is fully implemented.

IMPLEMENTATION BUDGET

Outdoor Interpretive Signage – One-time Cost	
Signs and graphics	$30,000
Visitor Center – One-time Costs	
Receptionist Area	$ 7,500
Orientation exhibit—panels, graphics, labels, props	$20,000
Orientation Video	$18,000
Audio Visual equipment for a video room	$ 2,000
Seating for video room	$ 2,500
Changing exhibits gallery needs	$ 5,000
	$55,000
Staffing – On-going Costs	
Education Curator (with benefits)	$60,000
Visitor from the Past Coordinator (partial benefits)	$35,000
3 part-time interpreters	$32,000
Volunteer and Scheduling Coordinator (with benefits)	$45,000
Training Courses	$ 1,000
Costumes	$ 8,000
Props	$ 2,000
	183,000

CONCLUSION

The implementation of the new Interpretive Plan will provide Rancho Los Cerritos with the ability to present and offer the history of the rancho and region in a unique, flexible and entertaining manner.

This Interpretive Plan clearly upholds and embraces the mission of Rancho Los Cerritos. It supports preservation of the structure and formal gardens to the 1930s, encourages reconstruction of 19th century building elements to expand the interpretive arena, and interprets the relationship of the Rancho's diverse peoples to the development of the greater Long Beach area. "Rancho Los Cerritos: Gateway to the Past" supports the stories with collections and utilizes a broad spectrum of educational and interpretive media in addition to exhibits. These are all designed to provide local residents and visitors with a more complete understanding and connection to the people and forces that shaped the region.

This plan also provides the flexibility needed to interpret this site with its complex interpretive problems. New research will allow for expanded characters and stories. Collaborations with the schools, colleges and other groups will cement the relationship of the site to the community. The entertaining manner of the main interpretive approach will appeal to local residents and tourists. The new barn will provide community meeting space and a location for year-round lectures, workshops and programs. The Visitor Center will offer a solid orientation to the site and feature changing exhibits on issues of interest to the community. Finally, the changing schedule of Visitors from the Past will offer the public reasons to return to the Rancho again and again for new "chapters" in the site's history.

APPENDICES - ATTACHMENTS

STAFFING REQUIREMENTS

To implement the Interpretive Plan, the following new staff position and/or position changes are needed:

Education Curator
Coordinates with schools and colleges in the development of new program initiatives, volunteer opportunities and paid and unpaid internships; develops new curricula and programs to meet school needs; designs and initiates educational programs for adults and families; develops new programs for day camps and youth groups and oversees their implementation; explores collaborative efforts with other groups.

Visitor from the Past Coordinator (minimum 24 hours per week)
Researches and writes scripts for historic characters; hires and trains Visitor from the Past interpreters; coordinates the Visitor from the Past program.

Three part-time people for "Visitor from the Past" Interpreters
This will provide a minimum interpretive staff at 60 hours per week. The three "Visitor from the Past" Interpreters would each portray four characters, one from each of the four time periods. This provides a beginning interpretive tour offering of twelve different characters (plus all volunteer docent characters). The interpreters should rotate on a schedule with the extra 20 hours being spent on Third Person theme tours and period activities to enhance First Person tours.

Individuals applying for the "Visitor from the Past" position should have at least a high school education. While education requirements are not that important, good verbal and communication skills are; and bi-lingual abilities are desirable. Multi-ethnic applicants will be needed to play some of the anticipated character roles. Theater and public speaking experience would be helpful in this position. Applicants should also be familiar with and able to utilize good research methods and have good writing skills. The Rancho will need to decide if it wants trained actors or enthusiastic amateurs; trained actors tend to be more theatrical and less directed by authenticity and historical accuracy.

Volunteer Coordinator/Scheduling Person (minimum 24 hours per week)
Handles the recruitment and retention of volunteers; coordinates volunteer assignments; schedules living history staff and volunteers; schedules tours and tour groups; schedules outreach programs; promotes Rancho programs at outreach fairs and to organizations.

Friends of Rancho Los Cerritos Docents and Volunteers
Volunteers are the lifeblood of the museum and will continue to provide much needed customer relations, interpretation and behind-the-scenes services for the Rancho. A vigorous program for docent recruitment, training, evaluation and retention is an on-going and constant effort. In addition to training as Visitor from the Past interpreters, offering third person theme tours, and implementing the Adobe Days Revisited and perhaps other school tours, volunteers will serve as demonstrators and continue to assist with both outreach programs and special events.

Junior League of Long Beach Volunteers

The museum's collaborative effort with the Junior League of Long Beach has benefited over 40,000 school children since its inception. League volunteers bring much needed leadership, energy and volunteer skills to the Adobe Days Revisited program. The site's educational role dovetails well with the League's emphasis on youth and education. In order to continue serving the community with this outstanding program on local history, a permanent relationship with the League should be encouraged.

INTERPRETIVE INFORMATION FOR CHARACTERS

Below and on the following pages is brief information on known residents at the Rancho. This list will continue to grow with further research and program development. These individuals are suggestions for possible characters for the "Rancho Los Cerritos: Gateway to the Past" interpretive program.

Known Owners and Residents at Rancho Los Cerritos:

1844-1866
John Temple, owner
Rafaela Cota Temple, wife of owner
Francisca Temple [d'Ajuria], John and Rafaela's only child
* See extracts from 1850 City and County of Los Angeles census, and 1860 federal census

1866-1890
Jotham Bixby, part-owner and Rancho manager
Margaret Hathaway Bixby, Jotham's wife
Children of Jotham and Margaret:
- George H (b. 1864)
- Mary H. (1869-1870)
- Henry ("Harry") (b. 1870)
- Margaret H. (1873-1878)
- Rosamond (b. 1877)
- Fanny W. (b. 1879)
- Jotham W. (b. 1884)

Reverend George W. Hathaway, Margaret Bixby's father (arrives in CA 1878)
Susan Hathaway (Bixby), Margaret Bixby's sister (ca. 1866-1873)
Martha Hathaway, Margaret Bixby's sister (arrives in CA 1878)
John W. Bixby, Jotham Bixby's cousin (1871-1873)
Francina Bixby, Jotham's sister (exact years of residence unknown)
Marcellus Bixby, Jotham Bixby's brother – owned 100 acres near Rancho Los Cerritos and ran a dairy(1870s)
Adelaide Bixby, Marcellus Bixby's second wife (1873)
Children of Marcellus and first wife Mary:
- Edward M. (b. 1859)
- Herbert G. (b. 1862)

George F. Bixby, Jotham Bixby's brother, grazes about 5,000 sheep on Los Cerritos lands
Charles Healey and his wife live briefly at the Rancho while surveying the land in the early 1880s
Known workers:
- Ying, cook (Chinese)
- Fan, assistant cook (Chinese)
- Juan Canedo, vaquero "inherited" from John Temple
- Jose
- Romulo

Miguel
Parlin, from Maine
Roy, an Englishman
John, a "Portugee"
Henry, an American
Charlie, an American
Johnny O'Connor (Irish)
Jim Rainey, teamster
Juan Ignacio and wife, a handyman
[Basque sheepherders]

* See extract from 1870 and 1880 census

1890-1929

* See attached lists with brief notes on residents

1930-1954

Llewellyn Bixby, Sr., owner
Avis Bixby, wife of owner
Llewellyn Bixby, Jr., son of Llewellyn and Avis Bixby (briefly, until 1934)
Elizabeth "Betty" Bixby, wife of Llewellyn, Jr. (briefly, in 1934)
Arthur Orchard, gardener
Paul Dudley, son-in-law of Llewellyn and Avis Bixby (late 1940s)
Avis Hathaway Dudley, daughter of Llewellyn and Avis Bixby (late 1940s)
Paul H. Dudley, Jr. (late 1940s)
Stephen B. Dudley (late 1940s)

1	2	3	4	5	6	7	8	9	10	11	12	13
		Thomas Head	25	M		Laborer		Mo				
		James Carpenter	25	M		Laborer		Mo				
		William Sanford	30	M		Laborer		Mo				
		Thomas Morgan	20	M		Laborer		Ireland				
		Thomas S Hereford	21	M		None		Aa				
		Baltazar	35	M		Laborer		Mex			1	
		Thomas Taglish	23	M		Laborer		England			1	
		Robert Tarbrook	15	M		Laborer		England				
		George H Preston	23	M		C H Officer		NY				
321	321	Jose Simon Roco	33	M		Manager		Spain				
		Juan M Oliverez	38	M		Laborer		Ca			1	
		Dolores Oliverez	18	f				Ca				
		Manuel I Fojo	45	M		Laborer		Spain			1	
		Nicolasa Fojo	40	f				Ca			1	
		Casimiro Lasa	30	M		Laborer		Ca				
		Rafael Lisalda	21	M		Laborer		Ca			1	
		Rafael Ruiz	23	M		Laborer		Ca			1	
		Francis	16	f				Ca				
		Felipe Piñedo	28	M		Laborer		Ca			1	
		Vicenta	27	f				Ca			1	
		Francisca	2	f				Ca				
		Tupajuria	35	M		Laborer		Sandwich Is			1	
		Alon	40	M	I	Laborer		Ca			1	
		Maria	16	f	I			Ca				
		Sisto	30	M	I	Laborer		Ca			1	
		Lucas	52	M	I	Laborer		Ca			1	
		Lina	30	f	I			Ca			1	
		Salomi	18	f	I			Ca				
		Diega	10	f	I			Ca				
		Merced	8	f	I			Ca				
		Ventura	12	f	I			Ca				
		Julian Padilla	55	M		Laborer		Ca			1	
		Jose Maria	1	M	I			Ca				
		Manuel	7	M	I			Ca				
		Lorenza	25	f	I			Ca			1	
		Marta	3	f	I			Ca				
		Leno	30	M	I	Laborer		Ca			1	
		Teresa	20	f	I			Ca			1	
		Ramon	2	M	I			Ca				
		Josefa	1	f	I			Ca				
		Manuel	30	M	I	Laborer		Ca			1	
		Venancio	22	M	I	Laborer		Ca			1	

1	2	3	4	5	6	7	8	9	10	11	12	13
		Conrado	12	M	I			Ca				
		Pabloi	40	M	I	Laborer		Ca			1	
		Miguel	25	M	I	Laborer		Ca			1	
322	322	Vicente Soltero	25	M		Laborer		Ca			1	
		Maria Antonia	20	f				Ca			1	
		Jose Zotello	50	M		Laborer		Ca				
323	323	Antonio Avila	60	M		Overseer		Mex			1	
		Miguel Gonzalez	35	M		Laborer		Mex				
324	324	José Zoila	30	M	I	Laborer		Ca			1	
		Lionicia	20	f	I			Ca			1	
		Manuel	12	M	I			Ca				
		Refugio	6	f	I			Ca				
		Maria Jesus	4	f	I			Ca				
		Francisca	1	f	I			Ca				
325	325	Juan De Mapa	33	M	I	Laborer		Ca			1	
		Materna	16	f	I			Ca				
		Francisca	4	f	I			Ca				
		Paulino	36	M	I	Laborer		Ca			1	
		Maliriana	30	f	I			Ca			1	
		Maria Soledad	15	f	I			Ca				
		Luis	10	M	I			Ca				
		Francisco	8	M	I			Ca				
		Paublino	6	M	I			Ca				
		Isidora	3	f	I			Ca				
		Juan José	2	M	I			Ca				
		Jose Antonio	$\frac{8}{12}$	M	I			Ca				
326	326	Fernando	30	M	I	Laborer		Ca			1	
		Carlota	20	f	I			Ca			1	
		Antonia	6	f	I			Ca				
		Madalena	2	f	I			Ca				
		Rafael	31	M	I	Laborer		Ca			1	
		Pedro	8	M	I			Ca				
		Gregorio	40	M	I	Laborer		Ca			1	
		Bernal	25	M	I	Laborer		Ca			1	
		Tomasa	16	f	I			Ca				
		Teodora	30	f	I			Ca			1	
		Maria Rosaria	15	f	I			Ca				
		Agrapino	40	M	I	Laborer		Ca			1	
		Ambrosio	40	M	I	Laborer		Ca			1	
		Vicente	14	M	I			Ca				
		Sinto	8	M	I			Ca				
327	327	Joaquim Ruiz	60	M		Grazier	500	Ca			1	

EXTRACT FROM 1860 CENSUS

State Calif. County or Parish Los Angeles Township, Ward or Beat Los Nietos Twp. Post Office Los Angeles

Index compiled by Book/Film Archive Extract by CPS Date of Enumeration 7-13-1860 Publication No. M653 Reel No. 59

Page	Dwelling No.	Family No.	Names	Age	Sex	Color	Occupation, etc.	Value of real estate	Value of personal property	Birthplace	Married in year	School in year	Cannot read or write	Remarks
431 or 139	1257	1258	Francisco Garcia	70	M		Farm Laborer			Mex			1	
			Rafael "	40	M		"		500	"				
			Maria "	35	F					CA				
			Francisco "	6	M					"				
			Delfina? "	5	F					"				
			Inez "	4	F					"				
			Andrea or Andres "	3	M					"				
			Lorenzo "	10/12	M					"				
			Juan Cañedo	28	M		Farm Laborer		100	"				
			Josefa "	40	F					Mex				
			Jesus	7	M					CA				
			Maria de los A. Garcia	35	F					Mex				
			Juan J. "	8	M					Mex				
			Francisca "	3	F					CA				
			Francisca "	1	F					"				
			Ramon "	22	M		Farm Laborer		50	Mex				
			Juana "	19	F					"				

1870

EXTRACT FROM 1870 CENSUS

State California County or Parish Los Angeles Township, Ward or Beat Wilmington Post Office Wilmington

Index compiled by _____ Extract by _____ Date of Enumeration 8/18/1870 Publication No. M593 Reel No. 73

Page	Dwelling No.	Family No.	Names	Age	Sex	Color	Occupation, etc.	Value of real estate	Value of personal property	Birthplace	Married in year	School in year	Cannot read or write	Remarks
5 or 634a	48	53	Bixby, John(Jotham)	39	M	W	Farmer	150,000	35,000	Me				
			Margaret	26	F	W	Keeping House			"				
			George H.	6	M	W	At home			Ca		1		
			Hathaway, Susan	24	F	W				Me				
	49	54	McDonald, Edmond/Edward	55	M	W	Laborer			NY				
	50	55	Vallmer?, Charles	38	M	W	Herder			La				
	51	56	Hodgkins, Edmond/Edward	55	M	W	Laborer			Mo				
	52	57	Henry?, William	35	M	W	Farmer			Va				
	53	58	Jones, Alfred	19	M	W	Herder			Me				
	54	59	Smith, William	22	M	W	Herder			Ire				
	55	60	Delonet?,Lemi?	45	M	W	Laborer			France				
		61	Sarat?, Eugene	44	M	W	"			France				
	56	62	Cota, David	29	M	W	Herder			Mexico			xx	
			Velarde?, Sabrino	31	M	W	Herder			Mexico			xx	
	57	63	Armandes??, Jose	40	M	W	Herder			Mexico			xx	
	58	64	Canedo, Juan	38	M	W	Laborer			Ca			xx	
	59	65	Bixby, Marcellus	46	M	W	Farmer		12,000	Me				
			Amanda	45	F	W	Keeping HOuse			Me				
			Edward	10	M	W	At home			Ca		1		
			Prentice	8	M	W	"			Ca		1		
			George	26?	M	W	Farmer			Me				
6 or 634b	59	65	Ah Lee	30	M	C	House servant			China				
			Ah Hop/Hoss??	29	M	C	"			China				
	60	66	Ramy, George	35	M	W	Laborer			Mo				
	61	67	Bixby, Thomas F.	30	M	W	Merch. Clerk		250	Me				

Ed 24 Line 30

Not mos unemployed/yr
Blind, Deaf&Dumb, Idioti
Insane, Maimed/Crippled

EXTRACT FROM 1880 CENSUS

State California County or Parish Los Angeles Township, Ward or Beat Los Nietos Tep. Post Office

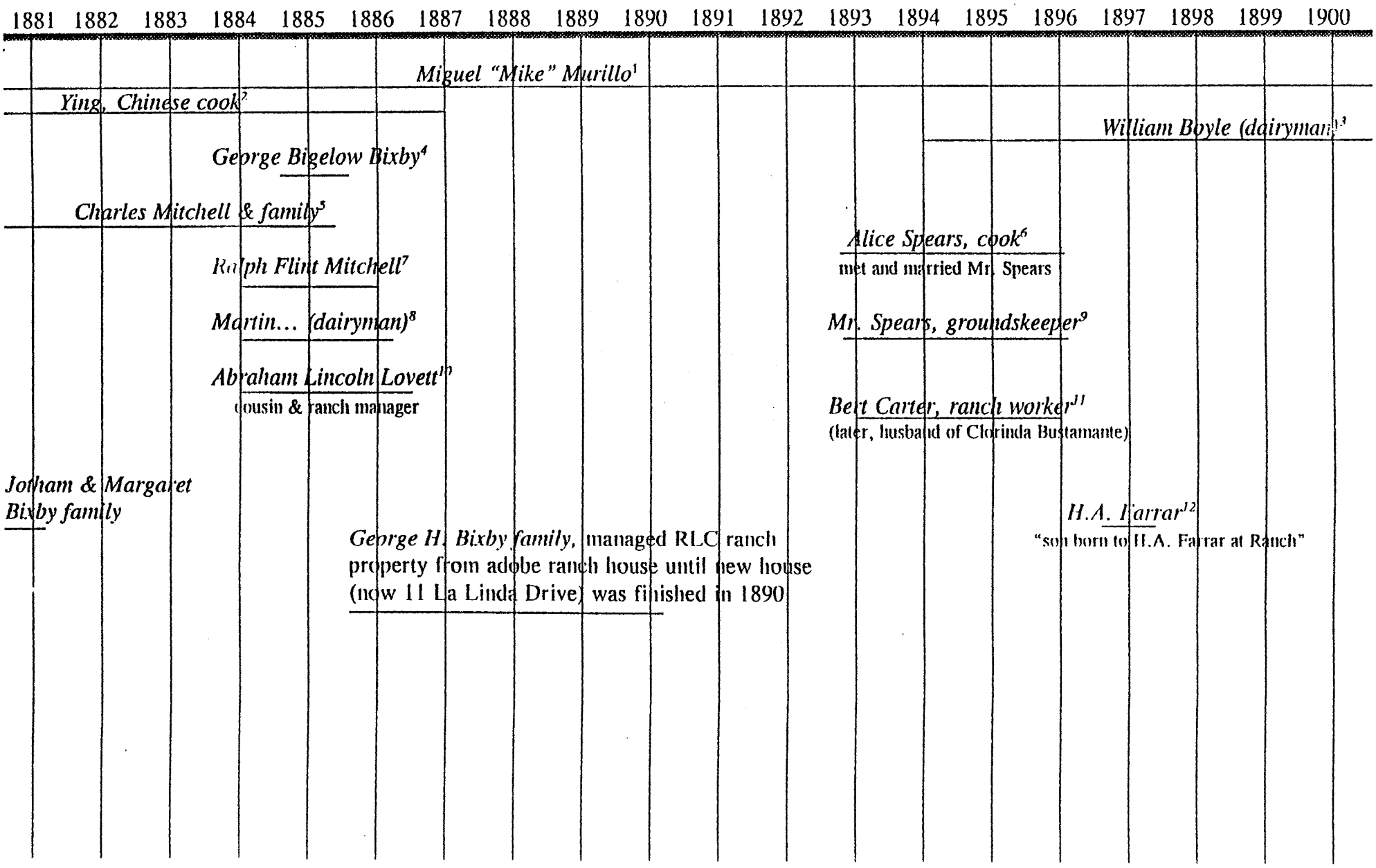
Index compiled by Soundex-FedArchi Extract by CES Date of Enumeration 6/?/1880 Publication No. T737/T9 Reel No. 2/6?

STREET	Page	Dwelling No.	Family No.	Name	COLOR	SEX	AGE	MO/YR	Relation to head/household	SING.	MAR.	WID/DI	MAR.W/IN YR	Occupation	school	/read	/write	Birth-place self	Birth-place father	Birth-place mother
	24		252	Bixby, Marcel?(Marcellus)	W	M	56?				1			Farmer				ME	ME	ME
				" Adelaide?	W	F	54		wife		1			keeping house				Conn?	?	?
				" Edward	W	M	21		son	1				?				Cal	NW	Me
				" Herbert	W	M	17		son	1								Cal		
				Lee, Ah	c	M	32?		boarding	1				??????				China	China	China
			253	Bixby, Jotham(Gotham)	W	M	49				1			Farmer.				Maine	Maine	Maine
				" Margaret W.	W	F	37		wife		1			Keeping house				Maine	Mass	?
				" George H.	W	M	15		son	1				???? scholl				Cal.	Me	Me
				" Henry L.	W	M	9		son.	1								Cal		
				" Rosamond R.	W	F	2		dau .	1								Cal		
				" Fannie W.	W	F	7/12	?	dau	1								Cal		
				Hathaway, George W.	W	M	73		fa-in-law					?minister???				Mass	Mass	Mass
				" Martha N.	W	F	33		si-in-law	1				school teacher				Maine	Mass	?
				Wheeler, Sarah	W	F	59		nurse			1		nurse				Maine	Maine	Maine
				Emerson, Charles	W	M	26		hired man	1				laborer				Maine	?	?
				O'Conor, John	W	M	23		" "	1				laborer				Ire.	Ire	Ire
				Chavis, Jose	W	M	50		" "	1				laborer				NewM	NewMexico???	
				Paslen, George	W	M	40		" "	1				laborer				Maine	Maine	Maine
		2	254	Chaupa(i)n??, E.	W	M	30/36?		" "	1				sheepherder				France		
			255	Sullivan, John	W	M	30		" "	1				sheepherder				Ireland		
			256	Bernardo??	W	M	25		" "	1				sheepherder				France		
			257	Cronan??, Bernard??	W	M	23		" "	1				sheepherder				France		
			258	Canedo, Juan	W?	M	45		" "		1			laborer				Cal-		
				" Maria	W?	F	30/31?		wife		1			keepinghouse				Cal-		

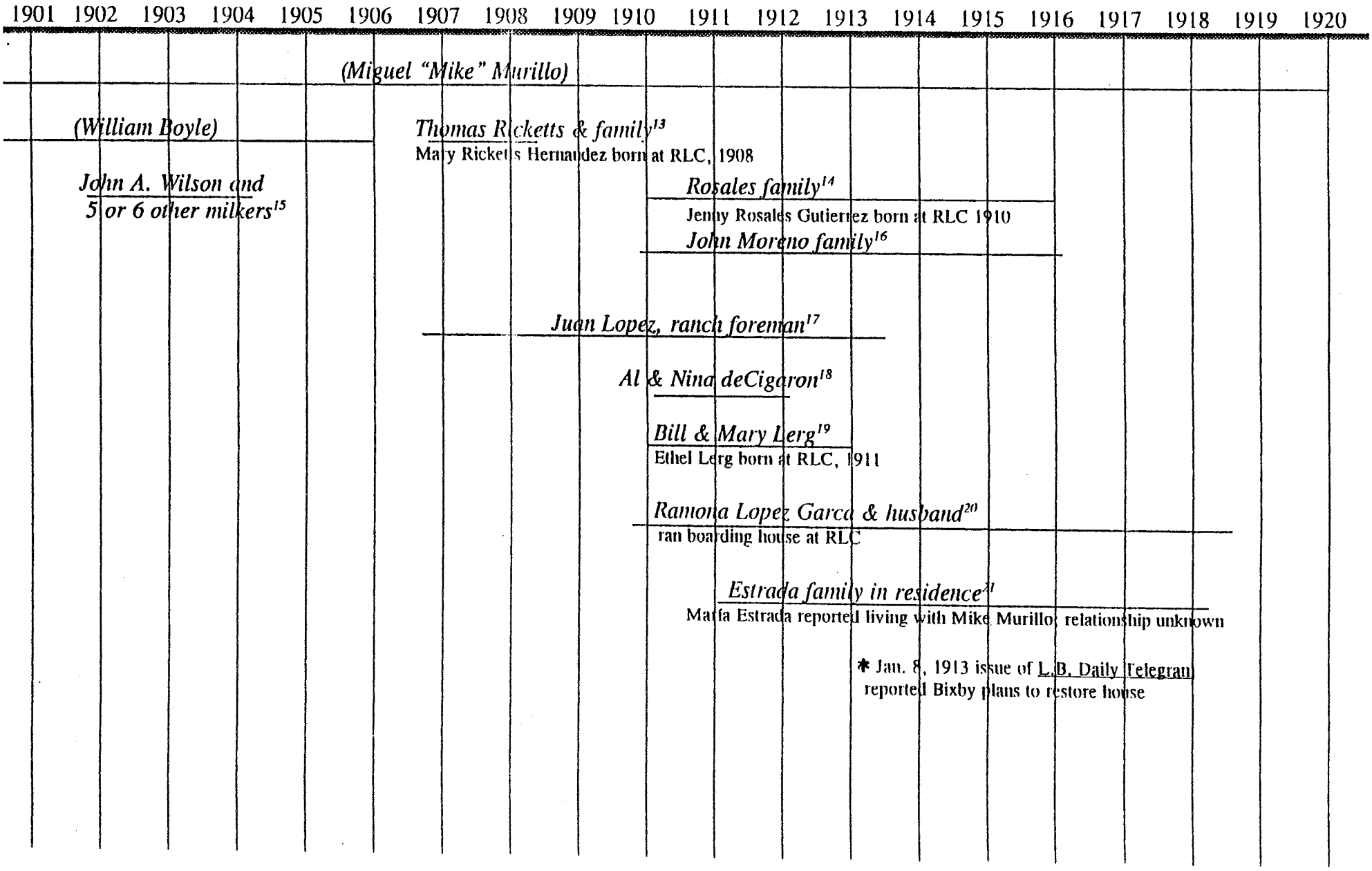
Index compiled by Soundex-FedArchi Extract by CES

STREET	Page	Dwelling No.	Family No.	Name	COLOR	SEX	AGE	MO/YR	Relation to head/household	SING.	MAR.	WID/DI	MAR.W/IN YR	Occupation	school	/read	/write	Birth-place self	Birth-place father	Birth-place mother
(cont)	256		258(cont)	Canedo, Juan	W	M	9?		son	1				at home?				Cal		
24/25				" Ramon	W	M	4		son	1				"				Cal-		
				" Maria	W	F	3		daughter	1								Cal-		
				Fan?, Ah	c	M	21			1				cook				China		
				Ying, Ah	C	M	28or38			1				cook				China		
	23	227	243	?????????????																
				(family of 4? w/)																
				Bixby, George B.	W	M	19 39?							farmer				Texas? Maine	Mass	
	24	232?	246	Bixby, Henry H.	W	M	44			1				farmer				Maine	Mass	Maine
				Kissel?, Benjamin	w	M	24		boarding	1				laborer				??????		
				White?, ?	?				?					?				?	?	

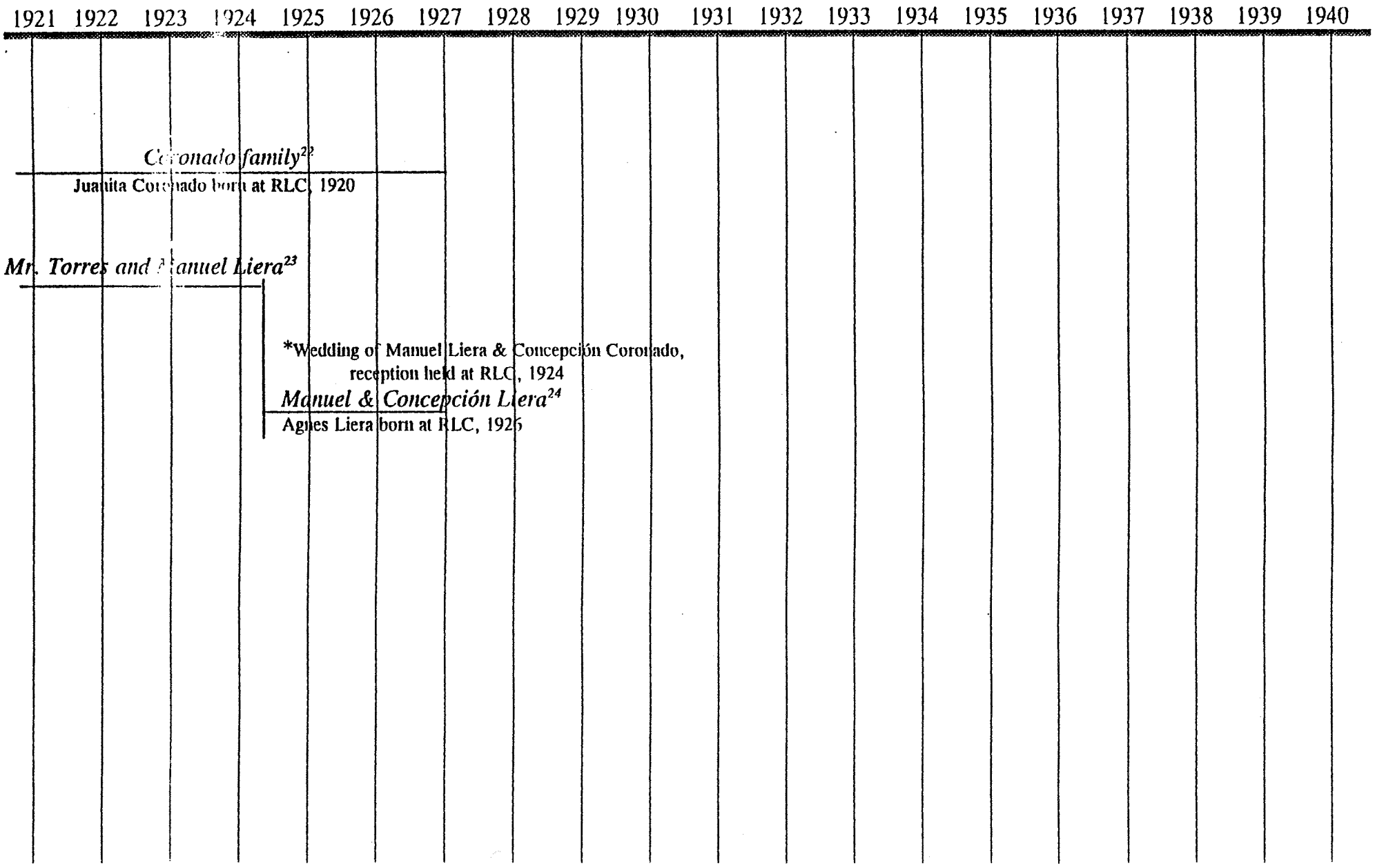
RANCHO LOS CERRITOS: TIME LINE OF RESIDENTS



RANCHO LOS CERRITOS: TIME LINE OF RESIDENTS



RANCHO LOS CERRITOS: TIME LINE OF RESIDENTS



Brief notes on the residents of the RLC adobe, 1890-1927.

William Boyle was a dairyman who leased the ranch house, outbuildings and adjacent land from George H. Bixby during the approximate years 1894 through 1906. He and his family lived in the house, and he employed 5 milkers, each of whom was responsible for a "string" of 30 cows. **John A. Wilson** was apparently one of these milkers around 1902-1904.

During the years 1893-1896, **Mr. Spears** served as a groundskeeper at the ranch. There he met a cook , Alice, whom he married.

Bert Carter also worked on the ranch in the middle 1890s and married **Clorinda Bustamante**. In 1968 Frank Coronado said she was 96 years old, so she would have been born about 1872.

Thomas Ricketts and his family moved into the adobe in 1907 and lived there for about two years. Their daughter **Mary Ricketts Hernandez** was born in the house in 1908.

The **Rosales** family and the **John Moreno** family lived at RLC from 1910-1916. **Jenny Rosales Gutierrez** was born there in 1910.

Juan Lopez lived in the adobe from 1906-1913 and served as ranch foreman.

Al and Nina deCigaron stayed in the adobe around 1910-1912. In 1992 **Alphonso deCigaron** (junior?) told of seeing the wooden forge box in the blacksmith shop around 1911.

Bill and Mary Lerg lived at RLC from 1910 to 1913, and daughter **Ethel** was born to them in 1911.

From about 1910 through 1918 **Ramona Lopez Garca** and her husband reportedly ran a boarding house in the adobe.

The **Estrada** family apparently lived at the rancho form 1911 to 1918. **María Estrada** was said to be consorting with **Miguel ("Mike") Murillo** during part of that period.

Perhaps the rancho resident who lived the longest time at RLC was **Miguel Murillo**, sometimes called Uncle Mike. Part (Cahuilla) Indian, he reportedly worked for John Temple and later Jotham Bixby and continued to live in the house until about 1920. He said he learned to break horses on the ranch when he was 14, and he enjoyed telling ghost stories to the children of relatives and residents. At the time of his death in 1931 he claimed to be 115 years old, but later research uncovered a baptismal record at Mission San Juan Capistrano indicating that he was only 101.

In 1920 the **Coronado** family moved into the adobe and lived there until 1927. Mrs. Coronado was born **Juliana Murillo**, daughter of Lazaro Murillo (nephew of Miguel) and Agapita Mireles, was baptised April 11, 1885. Daughter **Juanita Coronado** was born there in 1920, and other children included **Virginia (Babcock), Concepción (Liera), Eleanor (White), Frank** (born 1910) **and Mary**. Frank remembered first visiting the rancho when he was 4 years old, about 1914, for a barbecue.

About 1921 two new residents, **Mr. Torres** and **Manuel Liera**, moved into the house while working at the newly opened Virginia Country Club next door. **Manuel Liera** married **Concepción Coronado** at nearby St. Anthony's Catholic church on October 26, 1924. Their wedding reception was held in the old master bedroom of the adobe, with guests in attendance from several notable old Californio families including Figueroa and Dominguez. Daughter Agnes (or Rosie) was born at the house in 1926.

DEVELOPMENT OF VISITOR FROM THE PAST TOURS – AN OUTLINE

The current Interpretive Plan is based upon known, existing and documented broad areas of research. Research to be done for implementation will be more specific and focused.

Character Selection

Characters need to be chosen from each of the represented time periods. These may be real or composite characters. Real characters may come with easier documentation, but composite characters may serve a broader purpose such as highlighting a particular occupation or topic. In addition, fictional characters allow the interpreter more room to manipulate a character's past to serve educational goals. Selection of characters should be based upon chosen themes, interpretive areas and appropriateness to the site.

Research

Every character will need a history, a personality and a worldview. The character may be factual or a fictional composite. The research and documentation necessary for many of the Rancho's historic characters currently exists through primary, secondary, and archival data; also, staff have assembled a number of detailed character notebooks on key historic figures. Further information on contemporary history of the characters needs to be assembled to provide them with a "historical mindset;" characters need data regarding, social, economic religious and political events. Interpreters need training manuals, character profiles, research reports and research briefs that are accurate, thorough, and easy to use.

Research should also be conducted on etiquette practices during the four represented periods to ascertain how people acted, talked, and thought. This will vary from period to period--what was acceptable in one period was sometimes forbidden in another. This type of research is crucial. The credibility of many living history programs has been ruined the minute the character spoke. Newspapers and period novels are an excellent source for verbiage and conversation models.

Story and Tour Development

Story development should begin with the interpretive objectives for the character, and focus on the main themes of the site and the character's place in the Rancho's history. The storyline will need should capture the essence of the character From there the character tells one of the many Rancho stories from his or her perspective as he moves through the interpretive areas, using the building, grounds and objects to support his tour. The story must have a beginning and an end, and relate to the character's surroundings. It must be believable, accurate and engaging, and should provoke the visitor's interest.

Because each "Visitor from the Past" interpreter will be portraying four characters, they will have four very separate and important stories to tell. Each character's story is important and when all the stories have been completed very little of the Rancho Los Cerritos story should be left untold.

Scripting

Interaction with the visitor is the key to a successful portrayal. A script is recommended for all characters. However, the script should only serve as a springboard for interactive conversation. It should contain information about the character, subject matter, period opinions, and views of other characters in the same time period. This information is given in a natural, conversational manner with the visitor or through the interactive conversation of two characters, with the public listening in. Topical information contained within the script should allow the character to pick and choose subject matter as needed to supplement conversation. Remarks must be directed towards *educating* the visitor, and not just be offered to be "cute" or "funny;" the visitor will be "entertained" by the manner in which the educational material is delivered. Data provided in the scripts should have an interpretive focus and themes should be accurate and well researched.

A script is only an entry point into a conversation, and should be used to open lines of communication. When interpreters are comfortable with their roles, they can lay scripts aside and enjoy the interaction and conversations with visitors. The material will flow from their "character hearts" and not from the "interpreter's heads."

Costuming

Each living history character will need four different costumes, one for each time period. It is possible that pieces of the costumes may be interchanged and used to cut down on expense. However, each needs a full set for each period.

The costume will depend upon the character and time period. This will entail research in the area of clothing for varying social, ethnic and economic levels. Photographic documentation and written descriptions will be of great help in this area.

A total of 16 costumes will need to be procured for the initial living history program.

Training of Staff

Training should be coordinated by the Visitor from the Past Coordinator, who will bring in speakers, drama coaches, consultants and other staff or volunteers to assist as needed. A two-week daily training period is recommended. Characters will need to learn how to work with their costumes and artifacts. Language is very important and should be used on a daily basis until it comes naturally. The Interpreters will need to familiarize themselves with aspects of the rooms and interpretive areas; after all, they do live here. Areas of training should encompass:

Immersion in the Rancho's history
Local and regional history, geography and culture
Character development (including speech, deportment, etiquette)
Development of technical skills

Interpretive and communication techniques (including storytelling and public speaking)
Site rules and regulations
Role-play practice

If the character has a specific trade or hobby, then study will also be needed in that area.

Showcase

Once the training has been completed, a presentation for family and selected friends is advisable. A second showcase with a selected school group is also advised. When these have been evaluated and any needed adjustments made, the characters may make their public debut.

Sample information on developing historic characters and character notebooks follows.

A GUIDE TO DEVELOPING CHARACTERIZATIONS

You need to develop a well-rounded, credible, and authentic character of your time period. In order to do this, you will need a better understanding of your character than documentation alone can provide. A biographical sketch of your character will give you parameters to interpret all the historical information you study. You should end up with a biography of your character's life experiences.

Do not assume that your twentieth century reaction to information is the reaction your period character would have. You need to have an understanding of the cultural atmosphere of your time period and where your character fits into that environment. Determine what types of events your character could have experienced, and if you are relating this to your audience, is it believable?

Our purpose is to accurately inform and educate the public about the life and history of the time while making it personal and interesting. In order to do this, you need to become a period person with a past, present and future to relate.

CHARACTER OUTLINE:

Character Name:

Birth Date: Age Now:

Birth place and circumstances of birth:

Were you raised by your parents?

Nationality/Ethnic Background

Mother:

Father:

Ancestry:

What significant circumstances, if any, during your childhood affect your character?

What habits, problems, or benefits have resulted from these circumstances?

How has current or past events in local or world history affected your character?

What is your present family situation?

How do you feel about your present family status?

What is your religious affiliation and how has this affected your current situation?

What is your physical condition?

Were you educated?

What is your profession and professional status?

What is your present economic/social status?

Is your appearance and demeanor appropriate to your economic/social status?

What about your appearance or demeanor relates to the audience who you are?

Where do you live and how did you get to this event or site?

Why are you at the site or event?

How do you feel about being there?

List 3-6 significant conditions or events in the life of your character.

Summary: In a paragraph, describe your character in terms of personality, feelings, beliefs, attitudes, values and relations with others.

NAME.....

Adult C.C. Program

1ST PERSON CHARACTER DEVELOPMENT EXERCISE

Name _____ Trade _____

Born _____ Where _____

Spouse _____ Born _____

Date of Marriage _____ Where _____

Early life:

Father's Name _____ Born _____ at _____

Mother's Name _____ Born _____ at _____

Parents History

Character's Children:

Name _____ birth _____ at _____ death _____

Name _____ birth _____ at _____ death _____

Name _____ birth _____ at _____ death _____

Name _____ birth _____ at _____ death _____

Social Class & Economic Status:

Leisure Activities

Reading Habits

TRAVEL TO PRESENT SITE.....

BRIEF BIOGRAPHY OF SELF

RELATIONSHIP TO INTERPRETIVE PROGRAM

LIVING HISTORY PROGRAM
OHIO VILLAGE, OHIO HISTORICAL SOCIETY

Character Development - Work Sheet #1

Character Name:

Purpose of Character:

---

1. Family Background -

2. Work Experience -

3. Community Involvement -

LIVING HISTORY PROGRAM
OHIO VILLAGE, OHIO HISTORICAL SOCIETY

Character Development - Work Sheet #2

Character Name:

---

1. What is this character's condition of health?

2. What is his/her greatest fear?

3. What is his/her favorite pastime?

4. What is his/her aspect of work?

6. What is his/her least favorite aspect of work?

7. Where is his/her favorite place to visit?

8. Who is his/her best friend or associate?

9. Who is the one person in the village who this character likes the least?

10. How would you describe this character's general countenance?

LIVING HISTORY PROGRAM
OHIO VILLAGE, OHIO HISTORICAL SOCIETY

Character Development - Work Sheet #3

Character Name:

_____

Briefly describe your character as you think others in the village see him/her.

Where does your character work, what is the location of his/her private/public work area?

What possible activities might your character be involved in during the course of a normal day.

What possible situations/dilemmas might your character face?

Briefly describe how your character would approach making a decision about a situation/dilemma they would face.

How deep is your character with regard to Politics, Religion, Social Issues?

RESEARCHING THE PERSONA

1. Sources

    a. Primary or Original
        (1) The actual article
        (2) A contemporary picture (painting, engraving or drawing)
        (3) Letters
        (4) Journals
        (5) Estate Records
        (6) Court Records
        (7) Books of the period

    b. Secondary
        (1) Books
        (2) Articles
        (3) Research documents
        (4) Reproductions

2. Where to find them

    a. Libraries
        (1) Municipal and local
        (2) University
        (3) Private

    b. Historical Societies

    c. Archives

    d. Museums

    e. Antique Shops

    f. Local Governments

    g. Churches

    f. The "Bigies"
        (1) National Archives
        (2) Library of Congress
        (3) New York Public Library
        (4) Valentine Museum
        (5) The Smithsonian Institute
        (6) Williamsburg
        (7) Winterthur

3. Original material in secondary sources

    a. Be careful, make sure the work is reputable

    b. Read footnotes

    c. Check bibliographies

RANCHO LOS CERRITOS INTERPRETIVE PLAN

PORTAL: Laundry

TIME: 1866-1890 Bixby period

SETTING: laundry for the rancho

FURNISH PLAN: washtubs w/water/scrub boards/soap/clothes that can be washed by visitors/period clothes drying on line.

PURPOSE OF PORTAL (FOCAL THEME/LEARNING OBJECTIVES)

1. Immigrant labor
   domestic help/job assignments

2. Delegation of labor on rancho
   Types of jobs cook/laundry/ranch hands/etc.

3. Introduction of Bixby household
   family members

SUGGESTED CHARACTERIZATIONS:

Ying

Ranch Hand who is hunting for shirt.

Wife of handyman doing laundry.

SUGGESTED DIALOGUE WITH TIME CONDUCTOR:

This dialogue would be written based upon the diary of Ying. Such resource material would give us the background needed to correctly present historical characters and materials.

Opening dialogue;

LINK TO NEXT PORTAL:

Character Notebooks –Rancho Los Cerritos Historic Site

The following is a suggested outline only; you may add additional sections depending on the research you do. The Notebooks are meant to be fluid, so that relevant additional information can be added over the years. They should contain sufficient information to allow others to assume the character.

Personal Information

I. Character worksheet

II. Contemporary descriptions, letters (i.e. from Mary Bixby to husband), pictures of the character, census data, etc.

III. Historical listings and data on the character (i.e. excerpts from Adobe Days and other written sources, geneological information, birth/marriage/death certificates and articles)

IV. Information on character's family, spouse, children, siblings

V. Script (if relevant)

VI. Time line of key dates/highlights in life of the character -- *only* if this is a historical character

General Information

VI. Period phrases, costuming, hairstyles, etc.

VII. Manners, customs, religion, health, relevant domestic tasks, etc. (i.e. contemporary article on servants; cost of outfitting a cowboy; info from American Home Women)
[Over time and as sufficient research is done, it is likely that this section will need to be further divided.]

VIII. Occupation, the economy, current events, government [Over time, depending on the character, and as sufficient research is done, it is likely that this section will also need to be further divided, with topics such as the arts, technology, etc. added.]

IX. Historical information on the time period (i.e. "The Victorian era out West" or "a cowboy's life"), diary accounts of the period, etc.

Sample Tour: Ah Ying
Excerpted from a Masters Thesis by Sonia Brown

CHAPTER 4

FIRST PERSON INTERPRETATION

Ah Ying - First Person Interpretation Script

The script addresses Rancho Los Cerritos in its present interpretation as an 1878 ranch house. It is an interim measure that will address some of the issues that the National Endowment for the Humanities Self-study was concerned with such as liaison with the greater community, outreach etc. Therefore it is expected that the script will evolve as Rancho Los Cerritos progresses towards the study's recommendations.

It is the year 1878. The house is empty. Sheepshearers are here for one of the twice yearly shearings.[144] The older children and their fathers are out at the shearing station. Mrs. Margaret Bixby - Jotham's wife - and two of her sisters Miss Martha Hathaway and Mrs. Susan Bixby, the wife of John Bixby, Jotham's cousin, and the younger children including the baby, are in the back garden sorting apples for apple sauce, pie making and drying.

Ah Ying has been asked to keep an eye out for neighbors who have been invited to share in the surplus apple harvest. He is about to enter the foreman's room with a laundry basket when the visitors enter. He is wearing loose cotton Chinese style pants and

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[144]Smith, 84.

Excerpted from: Ah Ying: First Person Interpretation
An M.A. project by Sonia Brown, Spring 1996
California State University, Dominguez Hills

top with the sleeves rolled up. He also wears a full length white apron and on his head is a skull cap or felt hat.

In the Visitor's Center visitors have received an orientation to the Ah Ying tour including the customary history of the Rancho, and California, emphasizing the role of the Chinese. The docent will also explain the living history concept of the tour to the visitors.

The living history script which follows is meant to be an outline adaptable to seasons and events in the life of the Rancho, as well as to inclusion in a multi-character living history program. Sheep shearing, which took place at the Rancho in Spring and Fall, forms the backdrop to this script. However seasonal celebrations like the Fourth of July, and Christmas can also be incorporated during tours which take place at those times of the year. Ying might discuss the coming Christmas preparations in the weeks before the holidays or he might discuss the Fourth of July fireworks and compare them to the fireworks set off during the Chinese New Year celebrations in Los Angeles in February.

The speech patterns used in this script may seem rigid although the tone of Ying's address to the visitors is meant to be friendly and somewhat talkative. It is expected that the interpreter would be able to render this by verbal inflection and facial expressions. The interpreter should keep in mind that Ah Ying's first language is not English and while he may have picked up a few American nineteenth century popular phrases on his various occupations, some of his training in English might have come from a more formal source, a mission school or employers such as the middle class Bixbys. One might assume that

Ying would have been discouraged from using some of his acquired slang in front of the children by their parents but that he might slip occasionally.

Costume Suggestions

Based on historical photographs and Valery Garrett's Chinese Clothing I feel that the shan ku would be fairly easy for an average seamstress to recreate. Some commercial pattern companies carry various ethnically inspired designs similar to the basic shape of the shan ku which might also be adapted for our purposes.

Since Ying is a house servant he would most likely wear a skull cap. This could be constructed using a basic four section crown hat pattern and omitting the brim. A fake queue could be attached to the cap. If Ying were to go bareheaded the queue would have to be joined to the interpreter's hair and perhaps wound around the head.

Ordinary leather boots similar to the type worn in the nineteenth century could be worn in place of the traditional Chinese footwear, which would probably be difficult and expensive, although not impossible to recreate.

Script

Welcome I am Ah Ying the cook. Mrs. Bixby asked me to show you to the garden for refreshments. She and her sisters, Miss Martha and Mrs. Susan, have been getting the apples ready. We had so much fruit this year. Please would you follow me.

This is the foreman's room. Please excuse me while I get Mr. O'Connor's shirt for washing. He is going to Los Angeles tomorrow with Mr. Bixby's brother. Mr. Llewellyn to pick up supplies.

(leads visitors into foreman's room - picks up shirt off bed - he then points to photograph on windowsill)

That is Mr. O'Connor's sister. He told me that she will come to America next year from Ireland. I have a younger brother in China but my mother does not want him to come to America. He is the only other son in my family and she is afraid that something might happen to him. She heard about the killing of the Chinese in Los Angeles a few years ago and she knows that many Americans do not want the Chinese here. She wants me to come home. But I try to let her know that I am safe here at the ranch. We are far from many of the problems in the city. Sometimes I have to go to Los Angeles to see my uncle or to go to Chun Chick's shop on Spring Street for some Chinese spices or dried fish.[145] I always ask Mr. O'Connor to let me off right outside Chinatown. That way the boys in town won't be able to throw stones at me. They know Mr. O'Connor. I wait with my Chinese friends for Mr. O'Connor to bring me back here. The only other time I go to Los Angeles is to celebrate Chinese New Year. I don't go to Los Angeles very much because I am still teaching Ah Fan how to cook the different kinds of food for the family

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[145]Chun Chick arrived in Los Angeles from San Francisco to open the first Chinese store in 1861. Newmark, 298.

and the workmen. He keeps putting Chinese spices in everything! The children do not like those spices in their cookies.

(*Enters food store room - starts examining containers*)

The sheepshearers will be here for one more week and we are running out of beans and coffee. This oatmeal has too many worms in it. They will have to buy a new sack. I was going to make oatmeal mush for supper tonight but now I will have to make cracked wheat. I will use this to feed the chickens and ducks. Mr. O'Connor will also have to take some corn to the mill in Los Angeles. Mr. Sanchez, the cook up at the sheepshearing camp, told me that he would be making a special dinner for the men when the shearing is over so we will need more cornmeal for the tamales. I will also need some more flour and brown sugar so that I will have enough for baking the pies, cakes and cookies on Saturday. People in this country eat many sweet things. I make doughnuts two times a day because the family likes to eat them for breakfast and supper! And the children are always asking me to make sugar cookies for them. In China we make sweet things to eat only sometimes, but mostly for Chinese New Year. My mother and aunts used to make sweet cakes for the women's Moon festival and sometimes I would take one when they were not looking.

(*takes bag of oatmeal -leaves by doorway*)

Ah Fan can come and take this to the shed.

(*leads them to blacksmith shop calling out*) Mr. Brown! (*goes in*)

Mr. Brown is not here. He promised to fix my frying pan.

(looks around for pan) Here it is. *(examines it)* Mr. Brown does good work. He lives down by the river in a house with his wife and children. He has a fine son, big like him. I would like to have a son but I came to America to work on the railroad when I was very young. I come from a very poor village. My father wanted to come to America with his brother but both his parents became ill. He was the eldest son so he had to stay to take care of my grandparents so my uncle came to California with his cousin. They worked in the mines and would send a little money to us in China. My father saved some of the money so that I could come to California. My parents wanted me to marry before I left so that they could have grandchildren. They knew it might be a long time before I returned to China.

My uncle has been over here for over twenty years. He keeps talking about going back but he is still trying to get rich. He just became a partner in a herbal shop in Los Angeles so I don't think he will be going anywhere for a while. If any of you have pain in the bones go to Ah Lee's store in Chinatown. He has many special remedies from China. Tell him I sent you!

I didn't want to wait while my family looked for a bride for me. I should have listened to them but I wanted to leave on the same steamer that was taking my friends from the village. The ship was so crowded and dirty. The sailors treated us badly and there wasn't enough water during the last week. Many of us were sick with the fever and I thought I was going to die. The journey took more than two months. When I arrived in San Francisco, I was so thin and weak that I could not do anything for a long time. When

I got better my uncle got me work as a cook's helper at a Chinese railroad camp. When the railroad was finished there was no more work and so my uncle brought me back to San Francisco and we worked at the hotel. That is where I learned to cook American food. (*leads visitors out of black smith's shop -across patio- through left sun porch door- which should be left ajar- into dining- room maintaining conversation*)

There are people from many countries here at the Rancho and everybody likes something different to eat. Some of the sheepherders, who call themselves Basque, make their own bread in their iron cooking pots. Mr. Marcellus, Mr. Bixby's brother, learned how to make the special cheese from their country. They were so happy! I tasted some but it's too strong! The Mexican sheep herders like a lot of chilies in their food like Szechwan cooking in China. They always say it is not hot enough Senor Ying! Some of the men like Chinese food and, when I can, I make it specially for them. Grandfather Hathaway likes all kinds of food but because he is not well his daughters won't let him eat what he likes. When I was in San Francisco, many different people went to Chinese restaurants. At the hotel in San Francisco I also learned to cook French food but the Bixbys and most of the workmen like simple food. I cook mutton and some beef and I get fresh vegetables from Ah Fong who comes every Thursday.

(*said as if he is giving them inside information*)

Ah Fong told me that the taxes on the vegetable peddlers might be increased again. They just increased last year to three dollars! If it goes higher they will go on strike and

then go to the courts to see if they will lower it.[146] In San Francisco the Chinese laundrymen went to court and they did not have to pay the high taxes. I don't know what I will do if they have to go on strike. I have a few vegetables growing in my garden near the kitchen but it is not enough for thirty people! Mr. Bixby has some canned vegetables in the store room but they taste bad.

(*Enters dining room*) Fan! Fan! He must be still chopping wood for the old brick oven. I am going to need a lot to keep it going on Saturday. When I came here, I did not know how to use that old oven. The bread would burn all the time. But Senora Alvarez, the Indian lady, showed me how. She was a very good teacher. She and her family used to live on the Rancho with the other Indians. She told me that her father helped to build this house. They have all moved away now. We have an iron stove but everyone likes the bread from the old oven. But it is easier to cook doughnuts on the stove and it is good for heating lots of water for the baths, for the laundry, and for washing the milk cans.

(*leads visitors towards parlor- looks towards closet under stairs*)

Excuse me this door is open (*locks it*)

Sarah and Harry are always trying to get in there to get the matches to play with. One day they almost set the gazebo on fire but Mr. George saw them and put it out. This Saturday before I start making the apple pies I have to pack a big lunch for Sarah and the rest of the children. Miss Martha and Mister George, Mr. Bixby's oldest son, are taking them to the

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[146]Vegetable peddlers struck in the winter of 1878-79. Newmark, 514.

beach to collect shells. Sarah and Harry are always trying to roast birds or squirrels in the oven when I am baking and getting in my way. I like playing with the children and listening to their stories and they like hearing my Chinese stories but I will be glad when their holiday is over! (*long suffering sigh*).

(enters parlor picks up doilies and puts in laundry basket. Picks up stereoscope and picks up stereograph which includes "him" and puts into stereoscope)

Let me show you my photograph - can you see me? I am behind Mr. Jotham. Miss Mary, Mrs. Bixby's sister is on the veranda.

(bends down to pick up book off the floor-reads title haltingly) Oliver Twist This is one of Mister Harry's. He leaves his books all over the house. Last week I found one under the table in the men's dining room! Sarah is always losing her rings and her doll but she is more careful with her books. They both read a lot. Sometimes they read stories to me. Grandfather Hathaway is teaching me to read and write English and I am showing him some Chinese words. I like Grandfather Hathaway. He knows some things about China and sometimes we talk about the teachings of Confucius. He took me to Compton with him when he went to preach at the Church. Grandfather Hathaway wants me to be a Christian but I don't think my parents would like that.

Mrs. Margaret said that I should show you the veranda.

(*Leading group upstairs - veranda door is locked*) You can see a long way from there. You might see Mr. Bixby and the men shearing the sheep. Watch that you do not hurt your head. Mr. John Bixby sometimes forgets he is so tall and hits his head. (*Peers into*

nursery) I was going to show you baby Rosie but I think Mrs. Wheeler, the nurse, took her outside to Mrs. Margaret.[147] I have to get the key from Mr. Jotham's desk. We have to keep the door to the veranda locked because last year one of the little children climbed up on the roof by herself. Mrs. Wheeler stopped her from falling off the edge.

(*On the way to bedroom pauses at portraits of Fanny and Amasa*) These are Mr. Jotham's parents. They are no longer living. They had twelve children. I hope that I will have many children when I return to China - I hope I won't be too old to get a bride.

(*Searches for key in Jotham's desk on high shelf hidden behind a book.*) Did you see Mrs. Margaret's sewing machine? Mr. Jotham ordered it from a sewing machine agent in Los Angeles. It took a long time to get here from the factory. Mrs. Wise, the lady from Los Angeles who helps Mrs. Bixby with her sewing, showed her how to use it. My mother and sisters do some sewing in my village and they could make more money if they had a sewing machine. It would take many months to reach them over there.

Miss Francina, Mr. Jotham's sister brought this (*on the way out of room points to wreath*) with her from Maine when she came here. It is very strange. She told me it was made out of hair from different people! I do not like it. I wonder where the hair came from? She told me that she could make a whole picture out of my hair! (*horrified*) I cannot cut my hair. I could not go back to China without my hair. If I cut my hair it would mean disrespect to the Emperor. I would be punished! (*Goes to veranda door-opens it wide, ushers them out*) That is the summerhouse over there. Mr. John, Mr.

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[147]Rosamund Bixby was born in September 1877.

Jotham's cousin, finished repairing it last week and Mr. George and the children painted it. The children have tea parties out there for their mothers. They make tea from the mint growing under the windmill and I make the sugar cookies that they like so much.

There are so many different trees here. Grandfather Hathaway told me that many of the trees were planted by the man who built the house, Mr. Temple. He sent for them from all over the world. Some of these trees are like the ones in my country. In China we also have the orange and cherry trees and the pomegranate. When the river dried up for a long time, sometimes one of the old trees would die. But now Mr. Bixby has a well and a windmill and he can water the garden when it gets too dry.

In the summer sometimes the family has supper up here in the evening. Mr. John plays the fiddle and Mrs. Bixby and her sisters sing until the children fall asleep. I can hear them when I am sitting on the back porch downstairs.

I think I see Mr. George coming back with the children in the cart. He is early. They always stay out until it gets dark. I think once again the children did not obey their fathers and have been sent home. Last week one of them almost fell in the sheep dip and one of the boys tried to tie his cousin in the wool bag.(*shakes head and laughs*)

I will take you out to the garden now. (Leads them downstairs) The ladies are going to have refreshments in the summerhouse. Soon I will bring out lemonade and cookies.

CHAPTER 5

RECOMMENDATIONS

'Pidgin English' versus Standard English

For the purposes of this living history interpretation Ah Ying speaks with a limited vocabulary but will not speak the Pidgin English so commonly reported in nineteenth century and early twentieth century. While it is true that someone speaking an unfamiliar language will make errors in grammar I feel that Pidgin English is a little extreme. It is a creation of the English speaker meant to "talk down" to a person who speaks another language much as we "babble" sometimes to babies who we feel do not have the capacity to understand us. It is commonly accepted that such baby talk often results in children who tend to retain the pattern of speech they have learned. Similarly I suspect that if the Chinese did speak that way is because they were spoken to in Pidgin English which continued to reinforce incorrect pronunciation.

Ah Ying, who probably arrived in California in his teens, might have been fluent in English by the time he arrived at the Rancho. None of the Bixby family members who have written about him have said anything to the contrary. In addition both the Catholic and Protestant missionaries who worked with the Chinese community conducted English

classes as a component of Christianization.[148] It is also possible that some employers taught their Chinese employees. Sarah Blanchard's mother taught Ah Mee English.[149]

The use of Standard English enhances the living History Presentation while the use of anything resembling Pidgin English would produce a caricature.

Recommendations: Historical Background

As part of the implementation of the Ah Ying living history interpretation, it is recommended that Rancho Los Cerritos increase its historical material on the Chinese in California. It is important that the Ah Ying interpreter and the docent have as much background information as possible. This could be done by expanding the Rancho's research files, creating an index to pertinent material included in its collection of nineteenth century memoirs and travelogues, and by adding to its current library holdings.

Rancho Los Cerritos maintains extensive research files which are used to provide documentary evidence for its study of nineteenth century California lifestyles as they pertain to the Rancho. This information is also used as training material in docent education. The files contain relevant clippings, excerpts and references researched by staff members and interested Rancho volunteers. They include such topics as Christmas customs, the music and dance of Spanish, Mexican and American California, and the

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[148]Michael Engh S.J., Frontier Faiths: Church, Temple and Synagogue in Los Angeles, 1846-1888 (Albuquerque: University of New Mexico, 1992), 137.

[149]Blanchard, 38-39.

Basque culture in America. The expansion of the current file on the Chinese could begin with the material collected for this living history interpretation.

A reference index to source material on the Chinese included in the library's holdings of memoirs, travelogues, historical journals and other publications would provide greater accessibility for the researcher. Even the briefest sentence can contain a significant amount of information.

For example, Harris Newmark's memoirs, Sixty Years In Southern California, tell us about the Chinese vegetable peddler's strike, the negative reaction of Angelenos to Chinese New Year celebrations and his viewpoint of the Los Angeles Massacre. The chapter in Rancho Santa Margarita Remembered on Sing Yung, the cook, helps to fill in many of the gaps in our knowledge of Ying. This book is already in the Rancho's library but the chapter on Sing Yung could be used as a companion piece to the information on Ying.

The recommended additions to the Rancho's library range from the comprehensive to the specific. A History of the Chinese in California edited by Thomas Chinn covers a wide range of topics and provides a good introduction to the study of Chinese Californian history. Otis Gibson's The Chinese in America is a first person account of the anti-Chinese period of the 1870s California. His inclusion of Chinese Six Companies' pamphlets and letters show the Chinese response to the hostile society.

Another source of first person viewpoint is Marlon K. Hom's translation of Chin-Shan Ko Chih or Songs of Gold Mountain. This is a collection of poetry written by

Chinese in the early twentieth century about the emotional and physical experiences of leaving one's home and family, and living in the hostile environment of America.

Stuart Creighton Miller's The Unwelcome Immigrant: The American Image of the Chinese, 1785-1882 would also be an important addition to the library for its analysis of the roots of nineteenth century anti-Chinese racism.

Images of the Chinese as they appeared in the nineteenth century can be found in John Tchen's Genthe's Photographs of San Francisco's Old Chinatown and in Laverne Mau Dicker's The Chinese in San Francisco: A Pictorial History.

These are but a few of the publications which would be an asset to the Rancho Los Cerritos' library collection not only for the use of docents and interpreters but for the use of the community as well.

Recommendations: Interpreters

One of the decisions that Rancho Los Cerritos will have to make is whether to hire someone to do the living history interpretation or to continue to use interpreters from the ranks of its docents.

A professional interpreter may be the best choice, especially if, and when, the Rancho implements the National Endowment for the Humanities self-study's recommendations to remove all but the most essential items of the Rancho's collection from the exhibit rooms. It would probably take the talents of a professional to engage the audience's imagination against the backdrop of a bare room. However the cost of hiring

professionals may become prohibitive as the Rancho expands the living history program to include more characters.

An alternative to professional talent would be the use of what could be called semi-professionals such as college students involved in Asian-American studies or theater programs. Over-lapping year-long internships could be created and overseen by Rancho Los Cerritos and the university program directors. After the initial period of research and training the student would deliver a number of living history performances during the rest of the internship. At this stage another student would be beginning the research phase to take over the role. The use of students would be most effective if there is a consistent available pool.

The use of volunteers depends upon a commitment on their part. Many volunteers, no matter how enthusiastic, have families and jobs which naturally have priority. In addition Rancho Los Cerritos' pool of volunteers has always been predominantly female and Caucasian. As Rancho Los Cerritos expands its outreach it hoped that the volunteer pool will yield the volunteer needed for the Ah Ying interpretation.

Training of prospective living history performers should employ Rancho Los Cerritos's current techniques of exposing the performer to all aspects of the character's lifestyle as well as to that of the contemporary society. The interpreter should be conversant with as much pertinent information as possible so that if he is questioned about his period he can comfortably answer in character. Chinese movies dealing with China's

peasantry may also help the interpreter get a clearer understanding of Chinese philosophy and cultural mores.

Training should also include some sort of acting workshop directed by a professional acting coach. One of the drawbacks of volunteer performers is their inexperience with acting methods which would contribute to a more natural delivery. In addition rather than use whoever volunteers first, volunteers should be invited to audition before a committee made up of Rancho staff and docents.

The implementation of the Ah Ying living history interpretation depends upon funding and availability of interpreters. Furthermore the Rancho stages several special events and workshops throughout the year and if other characters are to be introduced it is probable that the Ah Ying living history interpretation would take place only on a periodic basis.

The Chinese Historical Society plans to open a museum in Los Angeles in the near future which will house, among other things, the artifacts from recent excavations of Old Chinatown. If a series of programs is to be developed to celebrate this long awaited occurrence this would be an appropriate time to take advantage of public interest to launch the Ah Ying living history interpretation at Rancho Los Cerritos.

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5.3 POTENTIAL ATTENDANCE AND MARKETING OPPORTUNITIES FOR RANCHO LOS CERRITOS

ERA

Economics Research Associates

Memorandum Report

POTENTIAL ATTENDANCE AND MARKETING OPPORTUNITIES FOR RANCHO LOS CERRITOS

TASK 2: RANCHO LOS CERRITOS MASTER PLAN

PREPARED FOR
RANCHO LOS CERRITOS FOUNDATION

MARCH 1999

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Memorandum Report

POTENTIAL ATTENDANCE AND MARKETING OPPORTUNITIES FOR RANCHO LOS CERRITOS

This memorandum report has been prepared by Economics Research Associates (ERA) as a subcontractor to Rancho Los Cerritos Foundation. ERA has been tasked with defining a concept for increased visitation and marketing at Rancho Los Cerritos within the appropriate context of the size, scale, and educational mission of the site.

INTRODUCTION

This report is Task 2 of the scope of work outlined for the ERA/Milford Wayne Donaldson team. In this Task, ERA has surveyed the Rancho Los Cerritos site and other comparable historic visitor attractions in Southern California. This report provides the results of ERA's survey. Historic sites reviewed are as follows: the Rancho Los Alamitos Adobe in Long Beach; the Leonis Adobe in Calabasas; the Olivas Adobe in Ventura, the Avila Adobe in Los Angeles; and the Hugo Reid Adobe in Arcadia. For each of these sites (including Rancho Los Cerritos), ERA provides a review of the physical facilities, an inventory of the attraction content, annual attendance, an overview of structured community programs, and a survey of funding sources including information about alternative revenue-generating programs.

FINDINGS

The initial phase of this study has provided some valuable insight into potential opportunities to increase visitation and marketing for Rancho Los Cerritos. Listed below are the key characteristics that were indicated by facility staff to have increased the attendance of the surveyed historic adobe sites:

- Strong interactive programs that directly involve visitors in learning about the history of the adobe. These programs include daily guided tours, interaction

Finally, ERA also noted during site visitations that signage for many of the historic adobes was poor. In fact for many facilities, the historical landmark sign was the only indication that the site existed. Improved signage would be a key factor in increasing community awareness and visitation.

Conclusions

There are several factors influencing attendance and marketing opportunities for Rancho Los Cerritos. In terms of marketing opportunities, Rancho Los Cerritos is essentially hidden within the golf course and has poor visibility from major roads and highways. Therefore, a strong advertising campaign is necessary to increase community awareness and thereby, increase attendance. Free advertising promotions through the local Convention and Visitors Bureau, radio stations, the City of Long Beach publications, and the internet are encouraged. Likewise, highly visible signage at closely located major intersections is important in identifying the proximity of Rancho Los Cerritos and in creating curiosity about the site. This will not only increase the awareness of residents living close to Rancho Los Cerritos, but will draw upon people passing through the area.

Strong program content is an important factor in increasing attendance to the site. Programs that encourage repeat visitation are highly important in creating a strong market draw from the local community. These programs typically include special events, rotating exhibits, education programs (such as lecture series for adults or art classes), and other programs that provide a new experience for visitors that have already been to the site.

Programs that increase visitation among a variety of age and ethnic groups are also important in encouraging visitation. One key issue in generating increased and more diverse visitation will be the extent to which improvements under the new Master Plan are made. For example, the development of additional building space for exhibitry, films, etc. will increase the opportunities for Rancho Los Cerritos to host innovative programs and encourage repeat visitation.

Among the surveyed historic sites, special events were instrumental in increasing community awareness. They also created an opportunity for the site to build a

HISTORIC SITES SURVEY RESULTS

ERA surveyed each of the comparable sites as a visitor. This allowed for the project team to define the experience at each of the facilities from a visitor's perspective. Following inspection of the site, ERA interviewed principal staff and gathered information about admissions, structured programs, and funding sources. Tables 1-3 provide an overview of the general information gathered at each of these facilities.

Rancho Los Cerritos

The Rancho Los Cerritos site is located on Virginia Road in the City of Long Beach. The site is partially surrounded by a private country club in a suburban area. With 4.7 acres, the Rancho Los Cerritos site contains a two-story Monterey-style adobe built in 1844. The property is owned and operated by the City of Long Beach under the Department of Parks, Recreation and Marine and is associated with two non-profit organizations (Rancho Los Cerritos Foundation and Friends of Rancho Los Cerritos). The property has been designated a National Historic Landmark, State Historic Landmark, and Long Beach Historic Landmark.

Besides the adobe, the site also includes a small building and tool shed, modern restrooms, a tiled patio and Mexican courtyard (added in 1981), two small parking lots, and a picnic area. The grounds contain a two-acre enclosed garden with an old water tower and a reconstructed 19th century gazebo. Of particular interest on the grounds are a number of trees that date back to the mid-19th century. Likewise, the facility has a large library with historical books.

Rancho Los Cerritos is open Wednesday through Sunday from 1:00 to 5:00 PM. The interpretive emphasis is of the 19th century Bixby era and most of the exhibit rooms reflect life in California during the 1860s to the 1870s. Compared to other sites, this site was one of the few sites that provided an interpretation of the 1800s. Most of the facilities surveyed by ERA provided interpretation of the early to mid-1900s. ERA notes that maintaining this historical interpretation is an important marketing factor that distinguishes Rancho Los Cerritos from potentially competitive projects.

Table 2

VISITOR PROFILES AND CHILDREN'S PROGRAMS AT COMPARABLE HISTORICAL ADOBES

Name	1996 Attendance	Visitor Origins	Visitor Age Profile	School Programs		
				Number of Groups	Number in Groups	Total No. Kids
Rancho Los Alamitos	29,000	Local (within 25 miles) Domestic Tourists International Tourists	30% Children 10% Teens 60% Adults	85	70	6,000
Rancho Los Cerritos	16,984	Local Orange County Los Angeles County Domestic and international tourists	26 % Children (in school programs)	252	17	4,391
Leonis Adobe	10,000	Local San Fernando Valley Residents Tourists Visiting Friends/Relatives Locally	60% Children 40% Teens/Adults	90	60	6,000
Olivas Adobe	27,000	Mostly Ventura County Residents Domestic Tourists International Tourists	45% Children 55% Teens/Adults	400-450	30	12,000 - 13,500
Avila Adobe	296,855	Los Angeles County Residents International and Domestic Tourists	Children Adults/Seniors	N/A	N/A	N/A
Hugo Reid Adobe	N/A	Local (0-30 miles) Domestic Tourists Visiting Los Angeles Inter'l Tourists Visiting Friends/Relatives Locally	Children (Mostly with school program) Adults Seniors (Few teenagers)	N/A	N/A	N/A

Source: Individual facilities and Economics Research Associates (1997).

Visitation Factors. Rancho Los Cerritos has experienced an annual visitation of 14,000 to 17,000 for the past three years. More importantly, there has been a gradual increase in visitation from 14,400 during the 1994-1995 fiscal year, to approximately 17,000 during the 1996-1997 fiscal year (data from July 1997 not included in this estimate). This increase not only reflects continued growth in public interest of the site, but it also indicates that there is strong potential to increase attendance.

Rancho Los Cerritos offers self-guided tours during the week and guided tours during the weekend. There were 252 guided school tours during the fiscal year of 1996-1997, totaling 4,391 school children with an average of 65-75 children per school day. These guided school tours make up 26 percent of the total attendance. Another 130 classes were turned away, indicating a strong and popular school program.

In addition to school programs, Rancho Los Cerritos offers several special event programs. These events are supported by the Friends of Rancho Los Cerritos. Approximately 3,600 people attend these programs. The more popular of these programs include the following:

- Mud Mania: A Celebration of Adobe, an investigation of mud used in building adobes, archaeology, vermiposting and pottery. Crafts, games, adobe construction, food, and music are part of this event. Admissions $3.00, kids under 3 free.
- Victorian Family Sampler: An opportunity for visitors to experience life on a rural ranch with period games, chores, crafts, live music, and adobe tours. Admissions $3.00, kids under 3 free.
- Christmas Candlelight Tours: A historic celebration of Christmas, interpreting Christmas customs during the late 1800s. Admissions $5.00.
- Christmas Open House: Self-guided tours of the decorated adobe with kids crafts, live music, holiday stories, etc. Admissions Free.

Rancho Los Cerritos also has summer evening concerts. However, the Rancho Los Cerritos staff has indicated that their evening concerts are infrequent. According to a recent

gardens and 20th century barns (including a variety of livestock and a blacksmith shop). Rancho Los Alamitos is located within a gated residential community in Long Beach and adjacent to California State University, Long Beach. The facility is owned by the City of Long Beach and operated by the Rancho Los Alamitos Foundation, a private non-profit organization. The City and the Foundation work together in a public/private cooperative effort.

Rancho Los Alamitos is known for being one of latest inhabited adobes in Southern California. Therefore, the facility provides an interpretation of life in the 1920s during the time period when the last owner was still living on the ranch. The gardens are particularly well known and were developed in the 1920s as well. Several magazines have written articles about the gardens at Rancho Los Alamitos, thus providing important publicity for the site. The facility is open the same hours as Rancho Los Cerritos and all tours are guided.

Visitation Factors. Rancho Los Alamitos receives an annual visitation of approximately 29,000 people. While visitation varies slightly from year to year, it has remained relatively steady over the past three years. Approximately 80 percent of the visitors are from within 25 miles of the site. International visitors represent about 5 percent of the annual visitation. Of the 29,000 visitors, approximately 6,000 are school children. Rancho Los Alamitos offers a strong program for school children with 85 groups per year and approximately 70 children per group. The majority of school children are from schools within Long Beach or the Orange County area. No fee is charged to school tour groups.

A variety of programs are offered at Rancho Los Alamitos to improve attendance and overall community awareness about the site. Among the more popular programs are:

- Fall Harvest Festival: Especially designed for children under the age of 12, this festival offers costume parades, an exhibition of gardens created by children in local schools, music, apple bobbing, and other activities. Admissions are free.
- Christmas Program: This program usually focuses on one aspect of Christmas relative to the late 1800s or early 1900s. Tours of the site decorated by local floral designers, dessert, coffees, tea, and punch are provided. Admissions $12.50 for non-members and $10.00 for members.

transported to the Leonis site in 1983. The Plummer House was noted as the oldest house in Hollywood before being moved to the Leonis site.

The Leonis Adobe has most of the amenities found on a ranch built in the mid to late 1800s. Therefore, visits to the site provide a well-rounded perspective on life during this time period. Likewise, there is an abundance of old farm equipment and livestock, all of which are used for special events and children's programs.

Visitation Factors. The Leonis Adobe has an annual attendance of approximately 10,000 people. Of this, 6,000 are school children from the 400 school tours given per year. The strength in visitation at the Leonis Adobe is the children's program. According to staff, this is most likely due to the presence of farm animals and farm equipment which are used with school programs. Prior to having farm animals, the program was not as successful with approximately 4,000 students per year and a total attendance of 8,000. The facility promotes a highly interactive program for children focused on educating children about life in the late 1800s. During tours, children can make adobe bricks or tortillas, feed livestock, take carriage rides, etc. Docents dress in period clothing and present the site through live interpretation.

The Leonis Adobe has several seasonal special events to promote the site and increase revenues. However, compared to the other facilities discussed, these programs are nominal and mostly geared for the school children visiting seasonally. Visitors to the Leonis Adobe are mostly from Los Angeles and Ventura counties. A small portion of international visitors attend the site and most of these visitors are staying with friends and relatives that live nearby. Unfortunately detailed information about the origin of visitors is not available for this site.

Finance Structure. Because the facility is owned by a private entity, funding information is viewed as proprietary and not directly available from the Leonis Adobe. From staff interviews, it appears that the majority of funding comes from an endowment, donations, and rental revenues from property owned by the Association adjacent to the Leonis Adobe. This adjacent property houses some office space and restaurants. Because no government support is provided, the Leonis Adobe charges admissions ($2.00 for adults, $0.50 for children) and thereby raises a large source of revenue from self-guided tours.

- Music Festival: Local musicians give concerts. Card tables are set up in the courtyard and people can bring a picnic lunch/wine, etc. Box lunches are sold as well. Admission to this event is $8.00. Many musicians play for free.
- Silent Movie Night: Local musicians write their own score to silent movies. This is highly popular in the community. Around 500 people attend at $3.00 per person. Popcorn is sold and usually the cost of putting on the event is covered by popcorn sales alone ($.50 for bag of popcorn).
- Halloween Tours: Halloween tours are given based in the history of the site with ghosts of the original owners appearing, etc. Admission $5.00.

According to management at the Olivas Adobe, it took about 3 years for many of these programs to start producing profitable revenue and increased attendance. In 1994 their attendance was 19,000 and in 1997 it was 27,000. This is an increase of approximately 29 percent. The facility director indicated that increases in attendance were from their innovative special events program. Likewise the director stated that creating special events and unique uses of the site provide an incentive for residents in the local community to return to the site more than once, an important concept in increasing community involvement and revenues.

The majority of visitors to the Olivas Adobe (90%) are from Ventura County. This reflects the strong reputation of the adobe with the local community. Approximately 8 percent of the visitors are domestic tourists from outside of Ventura County and an additional 2 percent are international tourists visiting Ventura County.

Finance Structure. The City of Ventura owns and operates the Olivas Adobe. The city provides the base operating and capital costs. Additional funding is raised by the Olivas Association. No revenue is obtained from tours because all tours are free. There are five full-time employees, one part-time employee, and fifty-four volunteers.

As indicated earlier in this section, the Olivas Adobe has recently changed its strategy in an attempt to bring in more revenue. This strategy has involved increasing the number and type of special events. The revenue from special events goes directly back into

The Avila Adobe is open 7 days a week from 10 AM to 5 PM. The highest months of visitation are from May through October. This trend in monthly visitation indicates that many tourists come to the adobe while visiting the Historical Monument. Some special events are held at the Avila Adobe. However, the majority of these events are held on Olvera Street and only partially involve the adobe grounds.

Finance Structure. The Avila Adobe is owned and operated by the City of Los Angeles within the El Pueblo de Los Angeles Historical Monument. Operating costs are provided for on an as-needed basis and are not separated out of the overall El Pueblo de Los Angeles Historical Monument. Therefore, detailed budget information on expenses and income is not available. There are fifty employees at the El Pueblo de Los Angeles Historic Monument, only one of which is assigned management of the Avila Adobe, among other tasks. Tours of the facility are provided by either El Pueblo de Los Angeles Historic Monument staff, or volunteers of the historic park (80 volunteers).

Some additional sources of revenue are obtained from commercial uses of the property. The courtyard is frequently rented out for weddings or parties. The cost of renting the facility is $300.00 for two hours and $150.00 for each additional hour, plus a deposit of $350.00. The Avila Adobe will also rent out chairs ($0.50) and tables ($2.00). The Avila Adobe curator indicated that although not always ideal, this is a steady source of revenues. Unfortunately, these revenues go back to El Pueblo de Los Angeles Historic Monument and not directly to the adobe. However, the Avila Adobe curator indicated that these events do increase public awareness of the site.

Hugo Reid Adobe

The Hugo Reid Adobe is located inside the Los Angeles State and County Arboretum in Arcadia. Built in 1839, this facility provides an interpretation of life in the early to mid-1800s. The site is 2.0 acres in size and consists of the adobe and an open courtyard. There are no additional buildings or on-site features other than the adobe. The grounds are surrounded by a large adobe wall and the house has walk-in entrances that are

5.4 DEVELOPMENT AND OPERATIONAL COSTS

ERA

Economics Research Associates

ECONOMIC FACTORS RANCHO LOS CERRITOS MASTER PLAN

PREPARED FOR
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ARCHITECT

MARCH 1999

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INTRODUCTION

ERA has examined the master plan and reviewed the current economic operating structure of Rancho Los Cerritos. In addition to the capital costs associated with the proposed development on site, ongoing operating costs and potential sources of revenue are also examined. This analysis has been undertaken in a way to realistically estimate potential revenue and expenses at Rancho Los Cerritos after the completion of the master plan. The estimates of potential revenues and expenses were based on existing performance and an analysis of comparable facilities in Southern California. Note that not all of the revenue opportunities identified in this report would be permissible under current City of Long Beach policy or under the existing terms of the Rancho Los Cerritos Foundation's use permit. Implicit in this discussion is the assumption that in order to implement the master plan, the policies of both the City and Foundation could be reexamined in order to maximize revenue opportunities. The areas that would require modifications to existing practices are detailed in the body of the report.

CURRENT CONDITIONS

City of Long Beach

Presently, Rancho Los Cerritos is owned by the City of Long Beach who administers its operations through the Department of Parks, Recreation and Marine. The City presently holds title to the Rancho and provides the entire funding for its operations. In the past, Rancho Los Cerritos has received funding for limited capital improvements on site. Rancho Los Cerritos' most recent operating budget is displayed in Table 1. At present the City is not currently budgeting major capital improvements of the scale and vision of this master plan process. However the City is responsible for maintaining the basic safety and annual operating requirements of the site. As a facility of the City of Long Beach there are presently several significant restrictions on the use of the site that are City of Long Beach policies. Most significantly these restrictions include:

Table 1
RANCHO LOS CERRITOS
October 1997-September 1998 Budget

Personal Services	***$254,471***
Permanent—Full Time	111,454
Part-Time Temporary	41,495
Workers' Compensation Applied	5,455
Fringe Benefits	81,345
Paid Time Off—Leave	14,722
Non-Personal Services	***$108,589***
Light & Power	5,110
Gas & Water	1,778
Contract & Consultant Services	58,557
Contractual Rental & Outside Services	27,235
Repair & Maintenance Services	1,000
Office machine Rental & Outside Service	390
Profession and Consulting Service	150
Training	117
Materials & Supplies	3,086
Office Supplies	2,500
Office Furniture & Equipment	0
Postage Charges	200
Small Tools & Equipment	0
Plumbing Materials & Supplies	900
Gardening Supplies	2,500
Janitorial Supplies	799
Auto Allowance	2,340
Machinery and Equipment Parts	0
Travel Expense	0
Memberships, dues, subscriptions	840
Books	711
Other General Insurance Changes	376
Interdepartmental Charges	***$ 15,790***
Public Service Bureau Charges	0
Information Services	8,700
Telephone Communications System	4,290
Reprographics	800
Postage	2,000
Total Budget	***$378,850***

Source: Rancho Los Cerritos

- Prohibition on rental of the adobe
- Limited free use for bona fide non-profit organizations

Friends of Rancho Los Cerritos

The Friends is a volunteer support group which assists the Rancho with its public programming and supports the educational and preservation mission of Rancho Los Cerritos. The Friends' primary mission is to provide volunteer support for public programming and tours through its docent program. The Friends support their activities primarily through donations, membership dues, special events admission and sales at the museum gift shop. Funds that are raised are used to pay for the cost of goods sold at the gift shop, special programs, small curatorial and gardening projects, and publicity. The 1997 financial statement for the Friends of Rancho Los Cerritos is displayed on Table 2.

Rancho Los Cerritos Foundation

The Rancho Los Cerritos Foundation (RLCF) was formed in 1994 and received its tax-exempt status, allowing it to become active, in 1996. The Foundation is primarily tasked with fund raising and development. Activities of the Foundation to date have included funding this master plan effort, partial funding of a part-time consultant for development, and initial marketing efforts for the site.

The RLCF was granted a facility use permit by the City of Long Beach. This permit allows the Foundation to use the site for Foundation-sponsored events, and may allow sponsorship of the use of the facility by other groups under its permit. This ability is not unrestricted, as events that take place must fall within the guidelines of the permit (which center around the historic site's educational mission, and public access to the park). Based upon these guidelines, the RLCF established a Facility Use Permit Policy of its own. Restrictions specified in the foundation's use permit include the following:

- Prohibition of commercial photography and filming on site.
- Closure of the site is permitted for private functions four times per year in acknowledgement of a significant donation to the RLCF ($25,000 or more).

Table 2
FRIENDS OF RANCHO LOS CERRITOS
Annual Treasurer's Report
1997

Revenues		
Donations	$1,839.90	
Membership Dues	5,424.00	
Museum Shop	7,875.57	
Trip	1,880.00	
Teachers' Manuals	113.00	
Other	56.19	
Programs	971.75	
Admissions to Events	6,537.26	
Total Revenues		***$24,697.67***
Expenses		
Museum Gift Shop	$2,601.23	
Curatorial Committee	350.26	
Garden Committee	2,443.98	
Docents Committee	410.42	
Marketing Committee	410.42	
Historic site Officer	318.55	
Membership	1,940.08	
Communications	1,134.69	
Programs	1,306.19	
Special Events	4,761.21	
Postage	594.36	
Printing	1,133.40	
Hospitality	766.67	
Equipment	664.35	
Trip	1,403.46	
Board and Treasurer	1,403.46	
Total Expenses		***$20,632.31***
Surplus (Deficit) of Revenues Over Expenses		***$ 4,065.36***

Source: Friends of Rancho Los Cerritos

- Use of the site during non-public hours is permitted for private functions in acknowledgement of a significant donation to RLCF ($5,000-$15,000).

The City's Facility Use Permit allows the Foundation to effectively administer the fund-raising activities that take place on site as an adjunct to the Foundation's primary mission of fund raising for enhancements, restoration and construction.

Table 3 displays the financial position of the Rancho Los Cerritos Foundation as of June 30, 1997.

MASTER PLAN

The master plan calls for capital investments in seven major improvements:

- ***The ranch house*** including a seismic retrofit and interior restoration.
- ***Reconstruction of the Cota Adobe*** to serve as a visitor's center in order to move that function out of the ranch house. The new structure would include rooms for a gift shop, visitor center with a video room, and volunteer office space.
- ***Caretakers building*** which would serve as a permanent on-site residence for the caretaker.
- ***New restroom buildings***
- ***Reconstructed barn complex.*** This would be the largest element in the master plan and would include room for a library and the archives and collections of the Rancho, administrative offices for the Rancho staff, as well as approximately 1,500 square feet of assembly space.
- **Improvements to existing outbuildings.** This would mostly include marginal improvements to small structures on site.
- **Site work** which will include extensive landscaping

Costs associated with each one of these elements by proposed phase of development are displayed in Table 4.

Table 3
RANCHO LOS CERRITOS FOUNDATION
Statement of Financial Position (Balance Sheet)
June 30, 1997

Assets	
Current Assets	
Cash – checking	$236,473.73
Money funds	36,733.66
Money fund dividends	63.28
Certificates of deposit	80,000.00
Total current assets	*$ 80,000.00*
Property and equipment[1]	*$ 675.00*
Total Assets	***$353,945.67***
Liabilities and Net Assets	
Current Liabilities	$ 0.00
Total Liabilities	***$ 0.00***
Unrestricted net assets	$ 49,430.67
Board designated funds[2]	104,515.00
Restricted endowment fund	200,000.00
Total Net Assets	***$353,945.67***
Total Liabilities and Net Assets	***$353,945.67***

Source: Rancho Los Cerritos Foundation

[1] Used computer equipment valued at current market rate; also noted under "unrestricted net assets".
[2] Board designated funds include $82,015 for Master Plan contract, estimated $15,000 additional for interpretive specialist, and $7,500 for nine month contract with Development Assistant.

Table 4
CAPITAL COSTS

	Total Cost	City Cost	Foundation Cost
Phase I	$2,013,673	$1,934,942	$ 78,731
Phase II	1,499,662	275,522	1,224,140
Phase III	2,662,905	221,650	2,441,255
Total	$6,176,240	$2,432,114	$3,744,126

Source: MWD, ECM, and Economics Research Associates.

The City of Long Beach is responsible as the titleholder on the Rancho for maintenance of the existing structures. As a result certain costs, such as seismic improvements on the adobe house itself, would remain the responsibility of the City of Long Beach. Other master plan elements such as construction of new structures on site would need to be borne by the RLCF.

REVENUE OPPORTUNITIES

There are two potential categories of revenue opportunities associated with the master plan. The first set is real estate based, or new revenue opportunities that come about from new structures and improvements to existing structures that are specified by the physical master plan. The second set, programmatic revenue opportunities, can be addressed by development of new marketing opportunities by the Foundation and the Friends of Rancho Los Cerritos.

Real Estate Based Revenue Opportunities

The physical construction of new space on the Rancho site primarily opens up three new sources of revenue. These include:

- An expanded gift shop in the Cota Adobe
- Meeting space in the reconstructed barn
- Donor Recognition

Cota Adobe

The larger gift shop in the Cota Adobe offers the Friends additional revenue generating opportunities. As was noted above, the Friends of Rancho Los Cerritos use the revenues from the gift shop as a major source of funding for their interpretive activities on site. It is likely that this arrangement would continue into the future after the construction of the new facility. However, increased revenues above a certain level might be set aside by the Friends as a contribution to capital costs. As part of this analysis ERA undertook a survey of selected gift shops at historic sites in Southern California. The results of this survey are displayed in Table 5.

Reconstructed Barn

Meeting space planned for the reconstructed barn also offers new revenue opportunities which could be used towards defraying costs of the master plan. It should be noted that the reconstruction of the barn is planned for phase three of the development and as such is planned to take place in the distant future. Revenue opportunities would not be available until this structure was complete. When contemplating the barn as a potential revenue source the time of development must be considered.

With the current plans for the barn, a 1,500-foot assembly space could be leased out for meetings and functions after hours on the weekends. Joint marketing of this meeting space with the Long Beach Convention and Visitors Bureau as a place for small groups to hold retreats and functions, or for functions associated with larger meetings and conferences held at the Long Beach Convention Center, presents a good opportunity to generate revenue from a space that is otherwise being constructed as part of the Rancho's overall historic preservation mission. However this could not be undertaken until phase III of the master plan was complete.

Costs for extra staff and security associated with these events should be set up as pass-through costs to the user by contingent labor and temporary workers. This is a common arrangement used by convention facilities which could likely be coordinated through the Long Beach Visitors and Convention Bureau. ERA estimates that this space could be

Table 5
Gift and Book Shops

Location	Approximate Annual Revenue	Products	Comments
Mission La Purisima Lompoc	$ 85,000	California history books, Mission replicas, Local arts and crafts	Volunteer operated including buyers
El Presidio de Santa Barbara	$ 6,000	Historical Books from Spanish Period Children's coloring books	Volunteer operated including buyers
Gene Autry Museum Griffith Park	N/A	Apparel, books, puzzles Souvenir Items	Paid professional staff
San Luis Obispo County Museum	$ 25,000	County History books Coastal, Rancho and Mission Period items	Volunteer/Staff operated
The Arboretum of Los Angeles County	$ 55,000	Horticulture related items books, T-shirts mugs, paper products	One full time staff person
Rancho del Encimo Encimo	$ 6,000	Books, Souvenirs	Volunteer operated
Olivas Adobe Ventura	$ 1,500	Books, Souvenirs	Bookstore currently closed for renovations

Source: Individual Facilities and California Museum Directory. California Institute of Public Affairs. 1991

realistically rented out 20 times a year at the cost of $400 per use, yielding revenues to Rancho Los Cerritos of approximately $8,000 per year.

Joint Development

Other opportunities exist in finding joint development partners for completing the master plan. Other Long Beach civic groups, private non-profits, and foundations looking for office or meeting space could be approached as joint development partners for developing space within the reconstructed barn. In the past there have been some initial discussions with such groups for co-locating at Rancho Los Cerritos. These have not progressed to the planning stages. Any determination of interior space of the barn would ideally remain flexible to allow for the recruitment of a joint development partner if one can be recruited to the site. Joint development may be difficult to achieve but, nevertheless opportunities should be considered if they become available in the future.

Donor Recognition

Just as universities and religious institutions sell the right to name portions of their facilities for families and corporations that make significant donations, Rancho Los Cerritos should consider this as an important tool to obtaining large gifts to help support capital improvements on site. At present the City of Long Beach will not allow for the renaming of public facilities in exchange for sponsorship. If this revenue source were to become available to the RLCF it would have to be on the basis of a renegotiation of this policy and a change in the City's current practice.

Buildings, rooms, and portions of the garden on site could be renamed to reflect the family or corporation that sought to have its name identified with the history of Long Beach as long as it did not interfere with the historic mission of RLC. Typically gifts that trigger renaming of major portions of the site should cover a minimum of 20 percent of total capital costs.

Programmatic Revenues

The following programs and activities could serve efforts to generate revenue on site. At present, Rancho Los Cerritos Foundation's facility use permit policy is restrictive and has limited opportunities for revenue generation through use of the site. This is particularly true in two areas which include using the site as a location for filming and for private parties.

Location Filming

Long Beach has become an increasingly popular place for the region's growing entertainment and media industries to film on location. The City of Long Beach has a very vigorous Film Commission which is widely respected in the industry. Rancho Los Cerritos, if available, would likely be an attractive site for commercial photography, and find occasional use as a location for film and television.

As part of this analysis ERA undertook a survey of policies for filming at other historic sites in Southern California. Table 6 displays the results of this survey.

In addition to gathering the empirical information, ERA interviewed site managers regarding their experience with filming as a revenue source. The general theme from the interviews regarding the use of a site as a film location is that it is inconsistent but highly profitable. Although it was agreed that using the site as a film location is one of the more risky endeavors, most site managers indicated that there are plausible ways to minimize damage and maximize revenue.

State-run facilities are required to allow filming with a permit and a paid staff person monitoring the film crews. State facilities such as the Adamson house at Malibu only charge for the hourly use of a ranger or park staff member. An interview with Joanne Burns, the City of Long Beach's liaison to the film industry, indicated that cities generally have different rates.

Table 6
Commercial Use: Film Location

Location	Description	Revenue	Number of Days
Castle Green Pasadena	1898 Moorish Colonial Historic Home	$5000-$6000 per day	varies
S.S. Lane Victory Memorial Museum San Pedro	1945 Historic War Ship	$1000-$4000 per day	10-20 per year
Will Rogers State Park Pacific Palisades	Historic Home and Grounds	$104 for permit Free filming on State land	varies
Paddison Farm Victorian Estate Norwalk	1879 Historic Farm and Gardens	$25,000-$30,000 per year	10-15 days
City of Long Beach	Various Sites	$250 permit fee $400/ day permit $200/ hr. negotiable location fee	varies
Olivas Adobe Ventura	Adobe House	$1000-2000/day Bond for Damage Student Films Free	1-4 shoots per year

Source: Individual Facilities and California Film Commission

The City of Long Beach is considered user-friendly by the film industry and Rancho Los Cerritos could be a viable attraction for film crews. The Rancho lies within the "30-mile zone" which is a benefit for studios, as they don't have to pay union members additional wages and per diems.

While interviewees agreed that filming was profitable, there were differing degrees of enthusiasm for film crews. Mission La Purisima had a few negative encounters with film crews and has essentially given up on filming. Castle Green, on the other hand, not only encourages filming, but also actively promotes it through their local film commission. Likewise, the manager of the Olivas Adobe in Ventura encourages filming because it can make the Adobe more recognizable to the community; this is viewed as free publicity for the site.

Most of the event coordinators agreed that filming is not as destructive as it used to be. They did highlight the importance of a refundable bond or security fee for possible damage incurred while filming. If a refundable security deposit is charged, the filming price set in writing, and there is a staff overseer, things can run smoothly. The event coordinator at Castle Green argues that if you really want to compete as a film location, promotion is key. The site should have a color brochure to send to location scouts and the local film commissioner. Sites can obtain a list of location scouts from the California Film Commission to actively solicit business.

Prices vary depending on whether the site is publicly or privately operated. Interior shots are in general more expensive than exterior shots, and in some cases, like at the Adamson House, interior shots are not permitted at all.

If the Foundation were to reconsider its policy regarding filming, location filming on site may generate $6,000 to $10,000 per year. The Rancho can limit costs to itself by requiring potential users to place a performance bond before they use the site, signing a contract obligating them to remediate any damage that might occur and offsetting all costs for additional security and temporary labor as a pass-through directly to the user. Marketing costs would be minimal as the efforts could be coordinated through the Long Beach Office of Special Events, Office of the Film Coordinator.

Private Parties

The historic gardens and the park-like setting of the Rancho make an attractive location for private parties, especially weddings. Other historic sites in Southern California market themselves as a site for these types of events, and can often host one or two events a week. In this analysis ERA conducted a survey of selected comparable facilities in Southern California.

Table 7 displays the results of this effort. The results of the wedding site survey were diverse and demonstrated a wide range of costs and services. As some of the sites are public and others are privately operated, the costs vary from simply a use permit to an hourly fee. Public and not-for-profit organizations in general require permits and use fees while private entities charge a flat hourly or daily rate for the use of their property. The common theme among the sites is the importance of maintaining the integrity of the historic site while implementing the commercial uses.

Both private and public facilities recommend the use of a refundable security deposit for possible damage incurred. And to preserve the integrity of the site, things such as amplified music, hours of availability and number of people allowed should be pre--determined and written up as a set of guidelines.

Event coordinators from the sites had differing opinions on how often weddings should be allowed and whether to allow both ceremonies and receptions or only receptions. The Olivas Adobe previously had 60+ weddings a year, but encountered problems in the past and now has limited the number. Casa Romantica, on the other hand, is trying to implement two weddings per day during the busy season to maximize revenue.

Event managers also differed in opinion on caterers. The special event manager at Castle Green stated that it is best to find one good caterer to work with exclusively. This minimizes damage as the caterer becomes familiar with the site and its rules and guidelines. According to the special event coordinator for the Adamson house, working with more than one caterer allows for more flexibility and leverage over the vendors. Their experience is that if there are problems with your exclusive caterer in March and there are twenty weddings in the summer, it is best to have back-up caterers. Instead of limiting clients to just

Table 7
Commercial Use: Weddings

Facility	Location	Cost of Space Rental	Restrictions	Approximate Capacity
Amy Strong Castle	Ramona	$ 1,450 Plus $3/person	BYO caterer 4 hour block	150
Paddison Farm Victorian Estate	Norwalk	$ 800 Wedding $ 1,600 Reception	Outdoor events only	25
Casa Romantica	San Clemente	$ 600	Exclusive Caterer Catering $39/per person	150
The Victorian House Heritage Square	Santa Monica	Package Price average $75/per person	Package Price includes everything	100
Adamson House	Malibu	$ 2,500	Not exclusive use of grounds Maximum 200	40
Rancho Capistrano	San Juan Capistrano	$ 2,550	Exclusive Caterer $14-22/per person	200
Castle Green	Pasadena	$ 1,500	Security Deposit Exclusive Caterer	200
Olivas Adobe	Ventura	Wedding Ceremonies only $200/hr $1,500 damage bond	No Receptions 2 hr. min	6

Source: Individual Facilities and Here Comes the Guide: Southern California. Hopscotch Press. 1997

one caterer, like many facilities, they are allowed to choose from a long list of caterers in the area. To minimize damage, the site has held open houses at the site for caterers so that they understand and protect the integrity and historic value of the space. Catering at Rancho Los Cerritos might be a difficult process to manage logistically due to a lack of appropriate facilities. However, other sites have been able to run events with a ceremony only at the facility with food service held elsewhere.

The special event coordinators interviewed highlighted the importance of having their site listed in the Here Comes the Guide for advertising purposes. Local Chamber of Commerce meetings as well as local newspapers also provide free publicity.

Considering that extra costs for security and maintenance can be set up as pass-throughs to the user, then assuming a use fee of $2,000 per use with 25 events per year, ERA estimates the value of using the facility in this manner to be around $50,000 per year.

Other Program Revenues

Opportunities for other commercial uses of the site, the market value of which is somewhat more indeterminate, are not considered in any potential revenue forecasts. Options include nursery sales from the Rancho's collection of native California plants, which would be a unique resource of the property and of value to regional gardeners and collectors of California native plants. Should the name Rancho Los Cerritos and the gate symbol be trademarked, there may be opportunities for the Foundation to market a trademarked name and symbol to manufacturers of commercial products, particularly food products, that would want to have an association with an historic California heritage. Special events such as art fairs, antique sales, and book fairs in which vendors would pay rent to the Foundation to set up temporary booths for weekend festivals or weekend special events, may also bear some consideration for use of the site. However, the opportunities for this may be somewhat constrained by the limited parking available immediately on or adjacent to the site.

OUTSIDE FUNDING SOURCES

In addition to the revenues identified in this section that call for increases in use on the site, there are other more traditional sources of revenue that are used by historical sites and cultural museums. These sources of revenue include:

- Bequests
- Corporate underwriting
- State, Federal, and Local grants
- Annual donations
- Capital campaign
- Tie-ins with local park and recreation bond issues

In order for Rancho Los Cerritos to take advantage of each of the above-mentioned sources effectively, a development position would need to be firmly established within the Rancho with a dedicated full-time employee pursuing these avenues. The revenues that might be made available from these traditional sources are quite variable and difficult to estimate. The effectiveness of this approach will be influenced by the willingness of prominent individuals in the community to support the Rancho, the effectiveness and skill of the marketing ability of the development office, and finally the existence of government support for cultural institutions such as Rancho Los Cerritos. In the final analysis, these more traditional sources of revenue will necessarily need to be a part of the overall funding for the master plan.

COSTS

In addition to new revenue opportunities that might come about as part of the master plan, there will be additional costs. Primarily, these would be engendered by new labor as identified by Rancho staff as part of this master plan process. New staffing requirements are envisioned as follows:

1. ***Education Director:*** This would be a full-time person responsible for promoting and operating Rancho Los Cerritos' education program. Estimated salary for this position ranges between $35,000 and $40,000.

2. ***Development:*** This position would be charged with fundraising within the community and pursuing appropriate grants and funding sources. This would be a full-time position with a salary ranging between $60,000 and $80,000 per year.
3. ***Maintenance:*** This position is envisioned as a general grounds and structural maintenance and janitorial function with a salary of between $30,000 to $35,000 per year.

In addition to these full-time positions, the Rancho would seek to fund three part-time employees at $600 per week with no benefits to serve as docents, and to assist with educational programs.

CONCLUSIONS AND RECOMMENDATIONS

While there are opportunities for increasing revenues on site, there are drawbacks associated with each one of them. There is no doubt that intensified commercialization of the site and the resulting opportunities for new revenues imply greater site use and privatization of access to the site at certain times. While not all of these options may be entirely palatable to the City of Long Beach, the Friends, and the Foundation for Rancho Los Cerritos, some combination of the menu outlined above of potential revenue sources could be put together to support the proposed capital improvements plan at the site.

Despite intensified commercialization, traditional revenue sources such as donations, annual giving programs, bequests, and a capital campaign will need to be at the core of any implementation effort. Fundraising at a scale necessary to complete this master plan as envisioned will no doubt be challenging. This will require close cooperation and mutual support between the City of Long Beach through its Department of Parks, Recreation, and Marine and the Foundation. It is important to be aware that absent appearance of a "white knight" to come along and underwrite substantial portions of the capital costs of this master plan, bits and pieces of approaches including generating more revenues on site, combined with development efforts, will over time allow for portions of this plan to be realized. In order to accomplish this, the Foundation should seriously review the limitations that they have imposed for commercial use of the site with an eye towards allowing for

greater private use, while at the same time balancing the need for on-site revenues with the historic preservation mission of Rancho Los Cerritos.

Finally, the City of Long Beach might consider taking a more active role in assisting with funding options such as the extension of municipal bond authority to allow for planned completion of the master-plan elements rather than relying on a pay-as-you-go system that would be implicit on and dependent on a capital campaign.

Table 8
Revenue Opportunities at Build Out
Rancho Los Cerritos Master Plan

Item	Range Low	Range High	Notes
Capital Costs			
Joint Development	0	503,969	Assumes joint development of the barn Approximately 20 to 30% of capital costs.
Donor Recognition	750,000	1,100,000	Assumes change in city policy on naming facilitates
Fund Raising	Variable		Includes annual giving, bequests, grants etc.
Total	***$750,000***	***$1,603,969***	
Operations			
Revenues			
Gift Shop *(Net)*	3,000	6,000	
Meeting Space (Barn)	4,000	8,000	
Location Filming	6,000	10,000	
Private Parties	25,000	50,000	
Others	0	60,000	Includes nursery sales, trademarking and misc. events
Subtotal	*$38,000*	*$134,000*	
Expenses			
Direct Labor	125,000	155,000	3 FTE positions
Fringe	75,000	93,000	60% of direct labor (City of LB Burden Rate)
Part Time Labor	18,000	31,200	
Subtotal	*$218,000*	*$279,200*	
NET (Operations)	**-$180,000**	**-$145,200**	

Source: Economics Research Associates

5.5 COST ESTIMATES FOR IMPROVEMENTS

RANCHO LOS CERRITOS MASTER PLAN
LONG BEACH, CALIFORNIA

ECM NO. E-450A

ESTIMATE SUMMARY

1.	RANCH HOUSE	
	SEISMIC RETROFIT / EXTERIOR RESTORATION	1,200,000
	REHABILITATION FOR INTERIOR	312,360
	ACCESSIBILITY ISSUES	74,200
	SUBTOTAL	1,586,560
2.	RECONSTRUCTION COTA ADOBE	433,273
3.	NEW CARETAKERS BUILDING	126,786
4.	NEW RESTROOM BUILDING	43,217
5.	RECONSTRUCTED BARN / SHED	1,007,937
6.	EXISTING BUILDINGS IMPROVEMENTS	
	SEISMIC MONITOR	1,000
	GARDNERS SHED	6,000
	WATER TOWER	1,000
	TRY POT (RELOCATION)	200
	HORNO	1,000
	INCINERATOR - SEISMIC / REPAIR	2,500
	GARDNERS HOUSE	3,000
	EXISTING TRASH ENCLOSURE	2,500
	SUMMER HOUSE RELOCATION	1,000
	SUBTOTAL	18,200
7.	SITE WORK	
	AREA A - CALIFORNIA NATIVE GARDEN	100,879
	AREA B - PERIMETER LANDSCAPE	107,106
	AREA C - PROJECT ENTRY / AC DRIVEWAY	255,938
	AREA D - ARROYO / OPEN SPACE	98,473
	AREA E - CENTRAL COURTYARD	22,609
	AREA F - CARETAKER'S RESIDENCE	24,535
	AREA G - VISITOR'S CENTER / D.G. DRIVEWAY	108,001
	AREA H - 1930'S MAIN GARDEN / VISITOR PARKING	144,581
	AREA J - BARNYARD / STORAGE OFFICE & STAFF PARKING	126,257
	AREA K - ORCHARD / HACIENDA LANDSCAPE	33,830
	NEW FIRE HYDRANT	2,400
	SUBTOTAL	1,024,609
	TOTAL	4,240,581
	CITY OF LONG BEACH LABOR BURDEN - 25%	1,060,145
	TOTAL PROBABLE COST OF CONSTRUCTION	**5,300,727**

NORMAL ESCALATION FOR A HEALTHY ECONOMY WOULD BE ON THE MAGNITUDE OF 106,000 PER YEAR.

ECM ASSOCIATES, INC.

CSI FORMAT
CONSTRUCTION COST ESTIMATE

PROJECT:	RANCHO LOS CERRITOS MASTER PLAN	ECM NO.:	E-450A2
LOCATION:	LONG BEACH, CALIFORNIA	PREP:	R. MURPHY
ARCH/ENG:	MILFORD WAYNE DONALDSON, FAIA ARCHITECTS	CHECK:	
ESTIMATE:	MASTER PLAN	DATE:	08/07/98
DESCRIPTION:	**COTA ADOBE RECONSTRUCTION**	GROSS SF:	2,122

ITEM NO.	ESTIMATE SUMMARY		SQ FT COST	TOTAL COST
1.0000	GENERAL CONDITIONS		11.07	23,488
2.0000	SITE WORK		4.15	8,800
3.0000	CONCRETE		20.68	43,885
4.0000	MASONRY		27.54	58,440
5.0000	METALS		0.47	1,000
6.0000	WOOD AND PLASTICS		21.42	45,449
7.0000	THERMAL AND MOISTURE PROTECTION		3.65	7,740
8.0000	DOORS AND WINDOWS		5.80	12,300
9.0000	FINISHES		6.60	13,995
10.0000	SPECIALTIES		1.18	2,500
11.0000	EQUIPMENT		5.18	11,000
12.0000	FURNISHINGS		0.00	0
13.0000	SPECIAL CONSTRUCTION		0.00	0
14.0000	CONVEYING SYSTEMS		16.97	36,000
15.1000	PLUMBING		2.95	6,250
15.2000	FIRE PROTECTION		2.50	5,305
15.3000	HVAC		9.13	19,380
16.0000	ELECTRICAL		10.16	21,559
	TOTAL DIRECT COST		149.43	317,091
17.1000	CONTINGENCY	15%	22.41	47,564
17.2000	GEOGRAPHICAL FACTOR	0%	0.00	0
17.3000	MARKET FACTOR	7%	10.46	22,196
	SUBTOTAL		182.30	386,851
17.4000	CONTRACTOR'S FEE	10%	18.23	38,685
17.5000	BONDS	2%	3.65	7,737
	TOTAL ESTIMATED COST		204.18	433,273

ECM ASSOCIATES, INC.

CONSTRUCTION COST ESTIMATE

COTA ADOBE RECONSTRUCTION

ECM NO.: E-450A2
DATE: 08/07/98

ITEM NO.	DESCRIPTION	EST QTY	UNIT	UNIT COST	TOTAL COST
6.0002	ROOF FRAMING	1,150	SF	8.50	9,775
6.0003	LEAN TO WALL FRAME	624	SF	5.40	3,370
6.0004	LEAN TO ROOF FRAME	184	SF	7.50	1,380
6.0005	INT. WOOD FRAME WALLS W/BOARD & BATTEN	696	SF	6.50	4,524
6.0006	WOOD FRAME PORCH	500	SF	16.00	8,000
	NOTE: ALL OF THE EXPOSED TO VIEW LUMBER TO HAVE FULL-SIZE RESAWN LUMBER. EXTERIOR WOOD TO BE CLEAR-ALL HEART REDWOOD. CEILING TO BE EXPOSED WOOD PLANK AT BASEMENT AND FIRST FLOOR.				
	SUBTOTAL # 6.0000				45,449
7.0000	THERMAL & MOISTURE PROTECTION				
7.0001	INSULATION - ROOF	1,200	SF	0.60	720
7.0002	WATERPROOF FOUNDATION WALL	1,710	SF	2.00	3,420
7.0003	CLASS B WOOD SHINGLES	1,200	SF	3.00	3,600
	SUBTOTAL # 7.0000				7,740
8.0000	DOORS AND WINDOWS				
8.0001	WOOD DOORS & FRAMES	8	EA	1,200.00	9,600
8.0002	WOOD WINDOWS	6	EA	450.00	2,700
	SUBTOTAL # 8.0000				12,300
9.0000	FINISHES				
9.0001	CLAY FLOOR TILE	1,234	SF	4.50	5,553
9.0002	PAINT INT. WOOD WALLS	1,392	SF	0.80	1,114
9.0003	PAINT LEAN TO	1,248	SF	0.80	998
9.0004	PAINT MISC. TRIM	1	LS	1,500.00	1,500
9.0005	CEILING FINISHES	1,932	SF	2.50	4,830
	SUBTOTAL # 9.0000				13,995

ECM ASSOCIATES, INC.

CONSTRUCTION COST ESTIMATE

COTA ADOBE RECONSTRUCTION

ECM NO.: E-450A2
DATE: 08/07/98

ITEM NO.	DESCRIPTION	EST QTY	UNIT	UNIT COST	TOTAL COST
10.0000	SPECIALTIES				
10.0001	MISCELLANEOUS SPECIALTIES	1	LS	2,500.00	2,500
	SUBTOTAL # 10.0000				2,500
11.0000	EQUIPMENT				
11.0001	FURNISHINGS	1	LS	11,000.00	11,000
	SUBTOTAL # 11.0000				11,000
14.0000	CONVEYING SYSTEMS				
14.0001	ELEVATOR	2	STOPS	18,000.00	36,000
	SUBTOTAL # 14.0000				36,000
15.0000	MECHANICAL				
15.1000	PLUMBING				
15.1001	PLUMBING	5	FIX	1,250.00	6,250
	SUBTOTAL # 15.1000				6,250
15.2000	FIRE PROTECTION				
15.2001	FIRE PROTECTION	2,122	SF	2.50	5,305
	SUBTOTAL # 15.2000				5,305
15.3000	HVAC				
15.3001	HVAC	1,938	SF	10.00	19,380
	SUBTOTAL # 15.3000				19,380

ECM ASSOCIATES, INC.

CONSTRUCTION COST ESTIMATE

COTA ADOBE RECONSTRUCTION

ECM NO.: E-450A2
DATE: 08/07/98

ITEM NO.	DESCRIPTION	EST QTY	UNIT	UNIT COST	TOTAL COST
16.0000	ELECTRICAL				
16.0001	ELECTRICAL	2,122	SF	9.50	20,159
16.0002	ALARM & SMOKE DETECTION	1	LS	1,400.00	1,400
	SUBTOTAL # 16.0000				21,559

ECM ASSOCIATES, INC.

CSI FORMAT
CONSTRUCTION COST ESTIMATE

PROJECT:	RANCHO LOS CERRITOS MASTER PLAN	ECM NO.:	E-450A3
LOCATION:	LONG BEACH, CALIFORNIA	PREP:	R. MURPHY
ARCH/ENG:	MILFORD WAYNE DONALDSON, FAIA ARCHITECTS	CHECK:	
ESTIMATE:	MASTER PLAN	DATE:	08/07/98
DESCRIPTION:	NEW CARETAKERS BUILDING	GROSS SF:	850

ITEM NO.	ESTIMATE SUMMARY		SQ FT COST	TOTAL COST
1.0000	GENERAL CONDITIONS		8.09	6,873
2.0000	SITE WORK		2.35	2,000
3.0000	CONCRETE		3.50	2,975
4.0000	MASONRY		0.00	0
5.0000	METALS		0.00	0
6.0000	WOOD AND PLASTICS		25.94	22,048
7.0000	THERMAL AND MOISTURE PROTECTION		6.89	5,860
8.0000	DOORS AND WINDOWS		11.56	9,830
9.0000	FINISHES		9.15	7,777
10.0000	SPECIALTIES		1.18	1,000
11.0000	EQUIPMENT		0.00	0
12.0000	FURNISHINGS		11.18	9,500
13.0000	SPECIAL CONSTRUCTION		0.00	0
14.0000	CONVEYING SYSTEMS		0.00	0
15.1000	PLUMBING		9.94	8,450
15.2000	FIRE PROTECTION		2.50	2,125
15.3000	HVAC		12.00	10,200
16.0000	ELECTRICAL		4.88	4,150
	TOTAL DIRECT COST		109.16	92,788
17.1000	CONTINGENCY	15%	16.37	13,918
17.2000	GEOGRAPHICAL FACTOR	0%	0.00	0
17.3000	MARKET FACTOR	7%	7.64	6,495
	SUBTOTAL		133.18	113,202
17.4000	CONTRACTOR'S FEE	10%	13.32	11,320
17.5000	BONDS	2%	2.66	2,264
	TOTAL ESTIMATED COST		149.16	126,786

ECM ASSOCIATES, INC.

CONSTRUCTION COST ESTIMATE

NEW CARETAKERS BUILDING

ECM NO.: E-450A3
DATE: 08/07/98

ITEM NO.	DESCRIPTION	EST QTY	UNIT	UNIT COST	TOTAL COST
1.0000	GENERAL CONDITIONS				
1.0001	GENERAL CONDITIONS (8%)	1	LS	6,873.20	6,873
	SUBTOTAL # 1.0000				6,873
2.0000	SITE WORK				
2.0001	SITE PREPARATION	1	LS	2,000.00	2,000
	SUBTOTAL # 2.0000				2,000
3.0000	CONCRETE				
3.0001	CONCRETE SLAB ON GRADE	850	SF	3.50	2,975
	SUBTOTAL # 3.0000				2,975
6.0000	WOOD AND PLASTICS				
6.0001	WOOD FRAME EXT. WALLS, REDWOOD BOARD & BATTEN SIDING DRYWALL INT., R-19 INSULATION	1,216	SF	8.20	9,971
6.0002	INT. WALLS, 2 X 4 STUDS, DRYWALL BOTH SIDES	584	SF	2.70	1,577
6.0003	ROOF FRAMING	850	SF	10.00	8,500
6.0004	MISC. ROUGH HARDWARE	1	LS	1,200.00	1,200
6.0005	REDWOOD DECK	200	SF	4.00	800
	SUBTOTAL # 6.0000				22,048
7.0000	THERMAL & MOISTURE PROTECTION				
7.0001	WOOD SHINGLE CLASS B ROOF	1,000	SF	4.50	4,500
7.0002	ROOF INSULATION	850	SF	0.60	510
7.0003	CAULK & SHEET METAL	850	SF	1.00	850
	SUBTOTAL # 7.0000				5,860

ECM ASSOCIATES, INC.

CONSTRUCTION COST ESTIMATE

NEW CARETAKERS BUILDING

ECM NO.: E-450A3
DATE: 08/07/98

ITEM NO.	DESCRIPTION	EST QTY	UNIT	UNIT COST	TOTAL COST
8.0000	DOORS AND WINDOWS				
8.0001	WOOD DOORS & FRAMES	3	EA	850.00	2,550
8.0002	FRENCH DOORS	2	PR	1,600.00	3,200
8.0003	CLOSET BI-FOLD DOORS	1	SET	480.00	480
8.0004	WOOD DOUBLE HUNG WINDOWS	8	EA	450.00	3,600
	SUBTOTAL # 8.0000				9,830
9.0000	FINISHES				
9.0001	DRYWALL CEILINGS	850	SF	2.00	1,700
9.0002	SHEET VINYL FLOOR	170	SF	1.80	306
9.0003	CERAMIC TILE FLOOR	52	SF	5.00	260
9.0004	CERAMIC TILE WALLS	60	SF	8.50	510
9.0005	PAINT INTERIOR WALLS	2,384	SF	0.50	1,192
9.0006	PAINT DOORS	9	LVS	60.00	540
9.0007	PAINT WINDOWS	8	EA	80.00	640
9.0008	CARPET	628	SF	3.00	1,884
9.0009	BASE (WOOD)	298	LF	2.50	745
	SUBTOTAL # 9.0000				7,777
10.0000	SPECIALTIES				
10.0001	TOILET ACCESSORIES	1	LS	500.00	500
10.0002	CLOSET ROD & SHELF	1	LS	500.00	500
	SUBTOTAL # 10.0000				1,000
12.0000	FURNISHINGS				
12.0001	KITCHEN & LAUNDRY CABINETS INCL. COUNTER TOPS	1	LS	9,500.00	9,500
	SUBTOTAL # 12.0000				9,500

ECM ASSOCIATES, INC.

CONSTRUCTION COST ESTIMATE

NEW CARETAKERS BUILDING

ECM NO.: E-450A3
DATE: 08/07/98

ITEM NO.	DESCRIPTION	EST QTY	UNIT	UNIT COST	TOTAL COST
15.0000	MECHANICAL				
15.1000	PLUMBING				
15.1001	PLUMBING	1	LS	8,450.00	8,450
	SUBTOTAL # 15.1000				8,450
15.2000	FIRE PROTECTION				
15.2001	FIRE PROTECTION	850	SF	2.50	2,125
	SUBTOTAL # 15.2000				2,125
15.3000	HVAC				
15.3001	HVAC	850	SF	12.00	10,200
	SUBTOTAL # 15.3000				10,200
16.0000	ELECTRICAL				
16.0001	ELECTRICAL	1	LS	3,400.00	3,400
16.0002	ALARM & SMOKE DETECTION	1	LS	750.00	750
	SUBTOTAL # 16.0000				4,150

ECM ASSOCIATES, INC.

CSI FORMAT
CONSTRUCTION COST ESTIMATE

PROJECT:	RANCHO LOS CERRITOS MASTER PLAN	ECM NO.:	E-450A4
LOCATION:	LONG BEACH, CALIFORNIA	PREP:	R. MURPHY
ARCH/ENG:	MILFORD WAYNE DONALDSON, FAIA ARCHITECTS	CHECK:	
ESTIMATE:	MASTER PLAN	DATE:	08/07/98
DESCRIPTION:	NEW RESTROOM BUILDING	GROSS SF:	160

ITEM NO.	ESTIMATE SUMMARY		SQ FT COST	TOTAL COST
1.0000	GENERAL CONDITIONS		14.64	2,343
2.0000	SITE WORK		0.00	0
3.0000	CONCRETE		5.00	800
4.0000	MASONRY		0.00	0
5.0000	METALS		0.00	0
6.0000	WOOD AND PLASTICS		42.00	6,720
7.0000	THERMAL AND MOISTURE PROTECTION		8.44	1,350
8.0000	DOORS AND WINDOWS		10.63	1,700
9.0000	FINISHES		11.47	1,835
10.0000	SPECIALTIES		21.25	3,400
11.0000	EQUIPMENT		0.00	0
12.0000	FURNISHINGS		0.00	0
13.0000	SPECIAL CONSTRUCTION		0.00	0
14.0000	CONVEYING SYSTEMS		0.00	0
15.1000	PLUMBING		62.50	10,000
15.2000	FIRE PROTECTION		3.00	480
15.3000	HVAC		0.00	0
16.0000	ELECTRICAL		18.75	3,000
	TOTAL DIRECT COST		197.68	31,628
17.1000	CONTINGENCY	15%	29.65	4,744
17.2000	ESCALATION FACTOR	0%	0.00	0
17.3000	GEOGRAPHICAL FACTOR	0%	0.00	0
17.4000	MARKET FACTOR	7%	13.84	2,214
	SUBTOTAL		241.16	38,586
17.5000	CONTRACTOR'S FEE	10%	24.12	3,859
17.6000	BONDS	2%	4.82	772
	TOTAL ESTIMATED COST		270.10	43,217

ECM ASSOCIATES, INC.

CONSTRUCTION COST ESTIMATE

NEW RESTROOM BUILDING

ECM NO.: E-450A4
DATE: 08/07/98

ITEM NO.	DESCRIPTION	EST QTY	UNIT	UNIT COST	TOTAL COST
1.0000	GENERAL CONDITIONS				
1.0001	GENERAL CONDITIONS (8%)	1	LS	2,342.82	2,343
	SUBTOTAL # 1.0000				2,343
3.0000	CONCRETE				
3.0001	CONCRETE SLAB ON GRADE	160	SF	5.00	800
	SUBTOTAL # 3.0000				800
6.0000	WOOD AND PLASTICS				
6.0001	EXT. WOOD FRAME WALLS, 1 X 12 BOARD & BATT INSULATION AND DRYWALL INT.	576	SF	8.20	4,723
6.0002	INT. 2 X 7 DOUBLE WALL W/DRYWALL	256	SF	2.80	717
6.0003	ROOF FRAMING	160	SF	8.00	1,280
	SUBTOTAL # 6.0000				6,720
7.0000	THERMAL & MOISTURE PROTECTION				
7.0001	WOOD SHINGLE ROOF	300	SF	4.50	1,350
	SUBTOTAL # 7.0000				1,350
8.0000	DOORS AND WINDOWS				
8.0001	WOOD DOORS & FRAMES	2	EA	850.00	1,700
	SUBTOTAL # 8.0000				1,700

ECM ASSOCIATES, INC.

CONSTRUCTION COST ESTIMATE

NEW RESTROOM BUILDING

ECM NO.: E-450A4
DATE: 08/07/98

ITEM NO.	DESCRIPTION	EST QTY	UNIT	UNIT COST	TOTAL COST
9.0000	FINISHES				
9.0001	CERAMIC TILE FLOOR	160	SF	5.00	800
9.0002	PAINT INT. DRYWALL	992	SF	0.60	595
9.0003	DRYWALL CEILING	160	SF	2.00	320
9.0004	PAINT DOORS & FRAMES	2	EA	60.00	120
	SUBTOTAL # 9.0000				1,835
10.0000	SPECIALTIES				
10.0001	MISCELLANEOUS SPECIALTIES	1	LS	3,400.00	3,400
	SUBTOTAL # 10.0000				3,400
15.0000	MECHANICAL				
15.1000	PLUMBING				
15.1001	PLUMBING	1	LS	10,000.00	10,000
	SUBTOTAL # 15.1000				10,000
15.2000	FIRE PROTECTION				
15.2001	FIRE PROTECTION	160	SF	3.00	480
	SUBTOTAL # 15.2000				480
16.0000	ELECTRICAL				
16.0001	ELECTRICAL	1	LS	3,000.00	3,000
	SUBTOTAL # 16.0000				3,000

ECM ASSOCIATES, INC.

CSI FORMAT
CONSTRUCTION COST ESTIMATE

PROJECT: RANCHO LOS CERRITOS MASTER PLAN
LOCATION: LONG BEACH, CALIFORNIA
ARCH/ENG: MILFORD WAYNE DONALDSON, FAIA ARCHITECTS
ESTIMATE: MASTER PLAN
DESCRIPTION: **BARN / SHED RECONSTRUCTION**

ECM NO.: E-450A5
PREP: R. MURPHY
CHECK:
DATE: 08/07/98
GROSS SF: 9,200

ITEM NO.	ESTIMATE SUMMARY		SQ FT COST	TOTAL COST
1.0000	GENERAL CONDITIONS		5.94	54,641
2.0000	SITE WORK		4.32	39,700
3.0000	CONCRETE		6.61	60,816
4.0000	MASONRY		0.00	0
5.0000	METALS		0.38	3,500
6.0000	WOOD AND PLASTICS		20.01	184,116
7.0000	THERMAL AND MOISTURE PROTECTION		2.66	24,451
8.0000	DOORS AND WINDOWS		3.12	28,660
9.0000	FINISHES		6.78	62,355
10.0000	SPECIALTIES		0.87	8,000
11.0000	EQUIPMENT		0.00	0
12.0000	FURNISHINGS		0.92	8,500
13.0000	SPECIAL CONSTRUCTION		0.00	0
14.0000	CONVEYING SYSTEMS		7.01	64,500
15.1000	PLUMBING		1.36	12,500
15.2000	FIRE PROTECTION		1.50	13,800
15.3000	HVAC		8.71	80,120
16.0000	ELECTRICAL		10.00	92,000
	TOTAL DIRECT COST		80.18	737,659
17.1000	CONTINGENCY	15%	12.03	110,649
17.2000	GEOGRAPHICAL FACTOR	0%	0.00	0
17.3000	MARKET FACTOR	7%	5.61	51,636
	SUBTOTAL		97.82	899,944
17.4000	CONTRACTOR'S FEE	10%	9.78	89,994
17.5000	BONDS	2%	1.96	17,999
	TOTAL ESTIMATED COST		109.56	1,007,937

ECM ASSOCIATES, INC.

CONSTRUCTION COST ESTIMATE

BARN / SHED RECONSTRUCTION

ECM NO.: E-450A5
DATE: 08/07/98

ITEM NO.	DESCRIPTION	EST QTY	UNIT	UNIT COST	TOTAL COST
1.0000	GENERAL CONDITIONS				
1.0001	GENERAL CONDITIONS (8%)	1	LS	54,641.41	54,641
	SUBTOTAL # 1.0000				54,641
2.0000	SITE WORK				
2.0001	EXCAVATE FOR BASEMENT	1,800	CY	8.00	14,400
2.0002	BACKFILL FOR BASEMENT	750	CY	16.00	12,000
2.0003	FINE GRADE AT SITE	1	LS	7,000.00	7,000
2.0004	WASTE ON SITE	1,050	CY	6.00	6,300
	SUBTOTAL # 2.0000				39,700
3.0000	CONCRETE				
3.0001	CONCRETE RETAINING WALL AND FOUNDATION	294	LF	164.00	48,216
3.0002	CONCRETE SLAB ON GRADE	3,600	SF	3.50	12,600
	SUBTOTAL # 3.0000				60,816
5.0000	METALS				
5.0001	MISC. METALS	1	LS	3,500.00	3,500
	SUBTOTAL # 5.0000				3,500
6.0000	WOOD AND PLASTICS				
6.0001	FRAMING, SECOND FLOOR	3,600	SF	14.00	50,400
6.0002	FRAMING, THIRD FLOOR	2,000	SF	14.00	28,000
6.0003	FRAMING, ROOF AREA	3,600	SF	9.00	32,400
6.0004	FRAMING, EXT. WALLS - 2 X STUDS, BOARD & BATTEN FIN	5,510	SF	8.20	45,182

ECM ASSOCIATES, INC.

CONSTRUCTION COST ESTIMATE

BARN / SHED RECONSTRUCTION

ECM NO.: E-450A5
DATE: 08/07/98

ITEM NO.	DESCRIPTION	EST QTY	UNIT	UNIT COST	TOTAL COST
6.0005	WOOD FRAME INT. WALLS, DRYWALL BOTH SIDES	5,420	SF	2.70	14,634
6.0006	ROUGH HARDWARE & BLOCKING	1	LS	13,500.00	13,500
	SUBTOTAL # 6.0000				184,116
7.0000	THERMAL & MOISTURE PROTECTION				
7.0001	WATERPROOF BASEMENT	2,940	SF	2.40	7,056
7.0002	INSULATION - WALLS	5,510	SF	0.50	2,755
7.0003	INSULATION - ROOF	3,600	SF	0.60	2,160
7.0004	WOOD SHINGLES, CLASS B	3,600	SF	2.80	10,080
7.0005	CAULK & SHEET METAL	1	LS	2,400.00	2,400
	SUBTOTAL # 7.0000				24,451
8.0000	DOORS AND WINDOWS				
8.0001	WOOD DOORS & FRAMES	26	EA	850.00	22,100
8.0002	WOOD WINDOWS	3	EA	320.00	960
8.0003	WOOD BARN DOORS	4	EA	1,400.00	5,600
	SUBTOTAL # 8.0000				28,660
9.0000	FINISHES				
9.0001	DRYWALL CEILINGS	2,760	SF	2.00	5,520
9.0002	CARPET	1,510	SF	3.00	4,530
9.0003	SHEET VINYL	1,747	SF	1.80	3,145
9.0004	RES. TREADS	44	EA	6.00	264
9.0005	WOOD FLOOR	4,260	SF	8.50	36,210
9.0006	CERAMIC TILE FLOOR	278	SF	4.50	1,251
9.0007	PAINT DRYWALL	19,110	SF	0.50	9,555
9.0008	PAINT DOORS & FRAMES	26	EA	60.00	1,560
9.0009	PAINT WNDOWS	4	EA	80.00	320
	SUBTOTAL # 9.0000				62,355

ECM ASSOCIATES, INC.

CONSTRUCTION COST ESTIMATE

BARN / SHED RECONSTRUCTION

ECM NO.: E-450A5
DATE: 08/07/98

ITEM NO.	DESCRIPTION	EST QTY	UNIT	UNIT COST	TOTAL COST
10.0000	SPECIALTIES				
10.0001	TOILET PARTITIONS	3	EA	850.00	2,550
10.0002	TOILET ACCESSORIES	20	PC	90.00	1,800
10.0003	URINAL SCREENS	1	EA	650.00	650
10.0004	KITCHEN EQUIPMENT	1	LS	3,000.00	3,000
	SUBTOTAL # 10.0000				8,000
12.0000	FURNISHINGS				
12.0001	KITCHEN CABINET AND COUNTER	1	LS	8,500.00	8,500
	SUBTOTAL # 12.0000				8,500
14.0000	CONVEYING SYSTEMS				
14.0001	ELEVATOR	3	STOPS	18,000.00	54,000
14.0002	WOOD STAIRS	3	FLTS	3,500.00	10,500
	SUBTOTAL # 14.0000				64,500
15.0000	MECHANICAL				
15.1000	PLUMBING				
15.1001	PLUMBING	1	LS	12,500.00	12,500
	SUBTOTAL # 15.1000				12,500
15.2000	FIRE PROTECTION				
15.2001	FIRE PROTECTION	9,200	SF	1.50	13,800
	SUBTOTAL # 15.2000				13,800

ECM ASSOCIATES, INC.

CONSTRUCTION COST ESTIMATE

BARN / SHED RECONSTRUCTION

ECM NO.: E-450A5
DATE: 08/07/98

ITEM NO.	DESCRIPTION	EST QTY	UNIT	UNIT COST	TOTAL COST
15.3000	HVAC				
15.3001	HVAC				
15.3002	HUMIDITY CONTROL	9,200	SF	8.00	73,600
		1	LS	6,520.00	6,520
	SUBTOTAL # 15.3000				80,120
16.0000	ELECTRICAL				
16.0001	ELECTRICAL	9,200	SF	10.00	92,000
	SUBTOTAL # 16.0000				92,000

5.6 PLANT LIST AND RECOMMENDATIONS

RANCHO LOS CERRITOS MASTER PLAN

Plants, Trees, Shrubs and Perennials Lists
KEY TO ABBREVIATIONS

A.D.: Adobe Days written by Sarah Bixby Smith. She mentions specific plants she remembers from her childhood when she visited the Rancho.

BBB: Blue Book of Bulbs Catalog from Chester Jay Hunt, Inc. [Period catalog lists bulbs available; property of M. Barnidge-McIntyre]

BBS: Blue Book of Seeds Catalog 1930 from Chester Jay Hunt, Inc. [Period catalog lists bulbs:available; property of M. Barnidge-McIntyre]

CHP0000b: Cerritos Historic Photo Collection number. This should always have four digits and might be followed by a lower case letter indicating that it is one of several copies. The date is the year the photo was taken.

CMP00000: Cerritos Museum Photo Collection number. This will have five digits and is unlikely to have a letter following it. The date is the year the photo was taken.

DJG: Don Juan's Garden. A poem written about the gardens of Rancho Los Cerritos by Sarah Bixby Smith. Lists several plants.

Los Fierros: Newsletter from Friends of Rancho Los Cerritos. The March 1967 issue has an article written by Margaret Byrkit with a rough tree inventory complete with map.

PL-LCR: Planting List for Los Cerritos Rancho prepared by R. Cornell. Nine pages, mostly duplicating the receipts from SPRN but additions are significant.

P.P.L.: Named on the Partial Planting List prepared by R. Cornell. Only pages 2 and 3 survive.

RDC-Inventory: A drawing showing existing plant material drawn by Ralph D. Cornell prior to the landscape renovation. A duplicate map drawn by Wm. Montgomery for his project is located in the garden section of his report.

RDC-PLAN: Refers to landscape plan #585-5 by Ralph D. Cornell dated March 3.1931.

R&CBGC: Rare and Choice Bulbs Catalog 1927, published by John Scheepers, inc. [Period catalog lists bulbs available; property of M. Barnidge-McIntyre.

SPRN: Item is listed on one of the three pages of receipts from San Pedro Ranch Nursery, dated March 1931.

SS: Select Seed Catalog lists historic annuals and perennials, often with introduction dates.

SCGB1942: Sunset Complete Gardening Book published in 1942. Lists plants "typically" available to home gardeners of the period.

SWGB1954: Sunset Western Garden Book published in 1954. Lists plants "typically" available to home gardeners of the period.

TDM: The Daffodil Mart is a catalog of historic bulbs often with introduction dates.

Abbreviations for Plant List Recommendations

AD	Aerating and Dethatching
AI	Automatic Irrigation
DI	Drip Irrigation
DW	Deep Watering
FT	Fertilization (General Maintenance)
H	Historic (Preserve, Restore or Utilize if possible)
IC	Introduced for Color and Accent
M	Maintain and Monitor
MT	Mowing and Trimming (General Maintenance)
N	Native (Good Specimen for CA. Native Garden)
NAC	Not Available Commercially
PDC	Pest and Disease Control
PH	Post-Historic
PS	Pruning and Shaping (General Maintenance)
RM	Removal (Only to preserve Historic interpretation)
RP	Replace as Needed (with same or similar species)
W	Weeding (General Maintenance)

Please refer to these abbreviations for future recommendations and documentation information to the following areas.

They are as follows:

Archival Receipts for Plant Purchases (not shown on RDC Plan)
Arroyo
Backyard Herb Garden
Backyard Perreniais
Backyard Shrubs 2
Backyard Trees 2
Backyard Vines
California Natives 2
Chainlink Fence Line
Courtyard Entry Inner Courtyard
Drive
Forecourt
Future Barnyard and Barnyard Entry 2
Future Visitors Center/Current Main Parking Lot & Island

Historic Roses
Maintenance Yard
Palms Backyard 2
Virginia Road Entry

Please refer to the plant lists on the following pages.

BOTANNICAL NAME	COMMON NAME	DOCUMENTATION	HIST. QUAN-TITIES	EXIST. QUAN-TITIES	SIGNIFICANT COMMENTS	RECOMMENDATIONS FOR FUTURE
TREES						
Acacia cyclopis				1	Unusual species	PH/NA
Acer macrophylla	Big Leaf Maple			1	Planted 1993	PH/M
Eriobotrya japonica	Loquat			2		PH/M
Fraxinus velutina	Ash				Seedlings constantly develop.	PH
Grevillea robusta	Silk Oak			1		PH/RM
Heteromeles arbutifolia	Toyon			7		H/M/RP/PS
Persea americana	Avacado			4		H/M/RP
Pittosporum undulatum	Victorian Box			2	Overgrown	H/M/RP/PS/HEDGE
Prunus lyonii	Catalina Cherry				Seedling occasionally develop	H/M
Pyrus communis	Pear			1	Extention of orchard? RDC drew a plan with fruit trees extending this far.	
Quercus agrifolia	Coast Live Oak			5	Planted 1993	PH/M
Robinia psuedoacacia	Black Locust			11	Design detail, origin unknown, constant conflict with utility lines.	H/M/RP/PS
Schinus molle	California Pepper			2		PH/M/PDC
Schinus terebinthifolius	Brazillian Pepper			3		H/M/RP/PDC/PS
SHRUBS & PERENNIALS						
Furcraea selloa						PH
Plumbago auriculata	Cape Plumbago					H
Pittosporum tobira	Mock Orange			1		PH/RM
VINES & GROUNDCOVERS						
Carpobrotus	Ice Plant	P.P.L., PL-LCR		Mass		H/RP/FT/AI

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chilensis						
Carprbrotus edulis	Ice Plant			Mass	Not good on slopes	H/RM
Hedera canariensis	Algerian Ivy			Mass	Planted by neighbor E. Killingsworth	PH/RM
Lantana montevidensis	Lantana			Mass	Planted by neighbor E. Killingsworth	H/M/RP/FT/AI
Vinca major	Periwinkle					PH/RM

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Area: ARCHIVAL RECEIPTS FOR PLANT PURCHASES; PLANTS NOT SHOWN ON RALPH D. CORNELL'S PLAN
Page: 1 Rancho Los Cerritos Historic Site, July 1998

BOTANICAL NAME	COMMON NAME	DOCUMENTATION	HIST. QUAN-TITIES	EXIST. QUAN-TITIES	SIGNIFICANT COMMENTS	RECOMMENDATIONS FOR FUTURE
TREES						
Pittosporum rhombifolium	Queensland pittosporum	SPRN	1	0	Original location on property unknown.	H
Prunus cerasifera "Atropurpurea"	Purple Leaf Plum	SPRN	1	0	Original location on property unknown.	H
SHRUBS						
Berberis acuminata		SPRN	3	0	Original location on property unknown.	H
Cassia artemisioides	Feathery Cassia	SPRN	3	0	Original location on property unknown.	H
Ceanothus spinosus	California Lilac Red-heart,	SPRN	10	0	Original location on property unknown.	H
Dovyalis caffra (Aberia)	Kei (or Kai) Apple	SPRN	1	0	Original location on property unknown.	H
Eugenia uniflora	Surinam Cherry	SPRN	3	0	Original location on property unknown.	H
Fremontodendron mexicanum (Fremontia mexicana)	Southern Flannel Bush	SPRN	5	0	Original location on property unknown.	H
Gardenia sp.	Gardenia	SPRN	2	0	Receipt does not indicate species. Original location unknown. Currently Gardenia veitchii planted by City are in Backyard by Erythrina crista-galli.	H
Grevillea banksii		SPRN	3	3	Currently have 3 in pots by Visitors Center. Original location unknown.	H/M/RP

Area: ARCHIVAL RECEIPTS FOR PLANT PURCHASES; PLANTS NOT SHOWN ON RALPH D. CORNELL'S PLAN
Page: 2 Rancho Los Cerritos Historic Site, July 1998

Grewia occidentalis	Lavender Starflower	SPRN	3	3	Currently have 3 in pots by Visitors Center. Original location unknown.	H/M/RP
Hibiscus schizopetalus	Japanese Lantern	SPRN	3	9	Original possibly was in Inner Courtyard, currently in Backyard under Erythrinia crista-galli, planted in 1994.	H/M/RP
Murraya paniculata (exotica)	Orange Jessimine	SPRN	2	4	Original location unknown. Currently in backyard under Erythrinia crista-galli, planted 1994.	H/M/RP
Templetonia retusa	Coralbush	SPRN	2	0	Hard to find, sounds interesting. Original location unknown.	H/M/RP
Tibouchina urvilleana (Pleroma)	Princess Flower	SPRN	2	2	1 currently in back corner of Backyard, 1 in Private Garden, Planted 1993 & 1998, original location unknown.	H/M/RP
Viburnum rhytidophyllum	Leatherleaf Viburnum	P.P.L.	?	0	No longer commonly in trade. Original location unknown.	H/NAC
Viburnum sandankwa		SPRN	16	0	The word sandankwa is a common name for Viburnum suspensum, which is already listed separately! Do not know what species was actually purchased or where it was planted.	H
PERENNIALS						
Agave americana	Century Plant	SPRN CHP0681- 1933-55	3	0	An Agave was planted in Activity Area ... americana? See photo.	H
Convolvulus mauritanicus (sabitius)	Ground Morning Glory	SPRN	25	2	Original location unknown. Planted in Backyard on either side of central brick walk way 1998.	H/M
Echium wildpretil	Tower of Jewels	P.P.L.	?	0	Original location unknown.	H
Euphorbia milii splendens	Crowns of Thorns	SPRN	6	0	Popular curiosity of the day. Original location unknown.	H

Area: ARCHIVAL RECEIPTS FOR PLANT PURCHASES; PLANTS NOT SHOWN ON RALPH D. CORNELL'S PLAN
Page: 3 Rancho Los Cerritos Historic Site, July 1998

Daphne odora "Aureo-Marginata "	Variegated Winter Daphne	SPRN	1	0	Original location unknown. Very popular old-fashioned plant. Hard to grow, it is better off in a pot.	H
Heliotropium arborescens (peruvianum)	Heliotrope	SPRN, DJG	6	12	Original location unknown. Planted 12 in planter boxes in Private Garden 1998.	H/
Leonotis leonurus	Lion's Tail	SPRN	2	1	Planted by back gate into Private Garden 1993.	H
Gerbera jamesonii	Gerbera/Daisy Transvaal	SPRN CHP0661 -1942	25	0	Not certain about photograph. Not easy to get species, hybrids have come a long way and are recognizably different. Original location uncertain.	H
Pimelea ferruginea	Pink Rice Flower	SPRN CHP0621 - 1932	5	0	Possibly Cutting Garden, see photo. Original location uncertain.	H
Romneya coulteri	Matilija Poppy	SPRN CHP0681-1933-55	3	3	Planted in Activity Area, see photo. California native. Currently located on Herb Hill by Picnic Area.	H/M
Veronica prostrata (rupestris)	Speedwell	P.P.L. ?CHP00636 -1937	?	0	Photo might be veronica. Original location uncertain.	H
VINES						
Bougainvillea spectabilis (brasilrensis lateritia)	Bougainvillea	SPRN	1	4	Currently in Orchard / Mexican Courtyard, planted by City. Original location unknown.	H/RM
Gelsemium sempervirens	Carolina Jessamine	SPRN CHP0062b - 1943	3	0	Large vine might be Gelsemium... Original location uncertain.	H
Pyrostegia venusta (Bignonia)	Flame Vine	PL-LCR	1	0	Original location unknown.	H
Thunbergia grandiflora	Sky Flower	SPRN	2	4	Currently on fence at Virginia Road. Original location unknown.	H/M

Area: ARCHIVAL RECEIPTS FOR PLANT PURCHASES; PLANTS NOT SHOWN ON RALPH D. CORNELL'S PLAN
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Thunbergia gregorii	Orange Clock Vine	SPRN CHP0620 -1935 CHP0656 -1942	4	4	Photos might show these vines. Original location uncertain. Planted 1 in pot in Inner Courtyard, 3 in pots by Visitor Center 1994.	H/M

AREA: CALIFORNIA NATIVES 2 PAGE:1

Input: 8-31-98
Edit: 9-1-98

Rancho Los Cerritos Historic Site, July 1998

BOTANICAL NAME	COMMON NAME	DOCUMENTATION	HIST. QUAN-TITIES	EXIST. QUAN-TITIES	SIGNIFICANT COMMENTS	RECOMMENDATIONS FOR FUTURE
TREES						
Cercis occidentalis	Western Redbud		0	1	Eagle Scout project late 1980s.	PH/M/RP
Heteromeles arbutifolia	Toyon		0	3	Seedlings allowed to mature from nearby historic planting.	PH/M
Pinus radiata	Monterey Pine	RDC- LAN, SPRN CHP0575- 1950	1	1	Also listed under future VC, Topped	H/RP
Platanus racemosa	California Sycamore		?	5	Important "borrowed landscape" to Inner Courtyard. The view of Sycamores over the west wall extends the feel of the smaller space. Repeating the same plant material inside the courtyard strengthens the link between the two spaces. Unknown when planted, believed to be from 30s – 40s.	H/M/RP
Prunus ilicifolia	Hollyleafed Cherry		10	0		H
Prunus lyonii	Catalina Cherry		8	7	Poor health, slime flux.	H/M/RP
Quercus agrifolia	Coast Live Oak		0	2	City added, armillaria?	PH/M
Sambucus mexicana	Elderberry		0	1	Planted 1998	PH/M

Input: 8-31-98
Edit: 9-1-98

SHRUBS						
Calycanthus occidentalis	Spice Bush		0	5	Planted Aug. 1994	PH/M
Carpenteria californica	Bush Anemone		0	3	Planted 1998	PH/M
Ceanothus griseus Horizontalis	Carmel Creeper		0	2	City Planted	PH/M
Ceanothus rigidus "Snowball"	California Lilac		0	1	City Planted	PH/M
Philadelphus lewisii	Wild Mock Orange		0	6	Planted Aug. 1994	PH/M
Ribes speciosum	Fuschia Flowering Gooseberry		0	10	Planted Aug. 1994	PH/M
Rosa californica	California Wild Rose		0	2	Planted August 1994	PH/M
PERENNIALS						
Aquilegia formosa	Western Columbine		0	10	Planted Aug. 1994	PH/IC
Asarum caudatum	Wild Ginger		0	3	Planted 1998	PH/IC
Heuchera maxima	Island Alum Root		0	36	Planted Aug. 1994	PH/IC
Iris douglasiana	Pacific Coast Iris		0	17	Part of Eagle Scout project in the late 1980s.	PH/IC
Lavatera assurgentiflora	Tree Mallow		0	4	Planted 3, Aug. 1994 Added 1, May 1998	PH/IC
Romneya coulteri	Matilija Poppy		0	3	Planted by City	PH/IC
Thalictrum polycarpum	Meadow Rue		0	8	Planted Aug. 1994	PH/IC

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Trichostema lanatum	Wooly Blue Curis		0	6	Planted Aug. 1994	PH/IC
Non-native plants in same area						
Acacia cyclopis			0	1	Seedling	PH/IC
Cercis canadensis	Eastern Redbud		0	1	Part of Eagle scout project from the 1980s.	PH/M/RP
Cinnamomum camphora	Camphor Tree		0	1	Seedling almost dead	PH/RM
Robinia pseudoacacia	Black Locust		0	2	Seedling / suckers that have been allowed to develop into mature trees.	PH/RM
Rosa banksiae	Lady Banks' Rose		0	1	Planted by rosarians	PH/RM

OTHER CALIFORNIA NATIVES TO CONSIDER RE-INTRODUCING OR ADDING

Area: Page 2 re Rancho Los Cerritos Historic Site, July 1998

BOTANNICAL NAME	COMMON NAME	DOCUMENTATION	HIST. QUAN-TITIES	EXIST. QUAN-TITIES	SIGNIFICANT COMMENTS	RECOMMENDATIONS FOR FUTURE
Ceanothus spinosus		SPRN				
Ceanothus cyaneus		SPRN				
Calliandra eriophylla	Fairy Duster					
Dendromecon harfordii or rhamnoides	Caltalina Tree Poppy					
Diplacus sp. (Mimulus)	Monkey Flower					

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Epilobium canum (Zauschneria californica)	California Fucshia					
Fremontodendron mexicanum	Flannel Bush	SPRN				
Galvezia speciosa	Island Bush Snapdragon					
Garrya elliptica	Coast Silk Tassel					
Keckiella cordifolia	Climbing Penstemon					
Lupinus albifrons	Silver Lupin					
Lyonothamnus floribundus asplenifolius	Catalina Ironwood	SPRN				
Mahonia nevinii	Nevin Barberry					
Myrica californica	California Wax Myrtle					
Rhus integrifolia	Lemonade Berry	SPRN				
Rhus ovata	Sugar Bush	SPRN				
Salvia apiana	White Sage					
Salvia clevelandii	Cleveland Sage					
Spinea douglasii	Douglas Spirea					

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Area: VIRGINIA ROAD ENTRY ***CHPO566***

INPUT: 9-1-98
EDIT: 9-1-98

Rancho Los Cerritos Historic Site, July 1998

BOTANNICAL NAME	COMMON NAME	DOCUMENTATION	HIST. QUAN-TITIES	EXIST. QUAN-TITIES	SIGNIFICANT COMMENTS	RECOMMENDATIONS FOR FUTURE
TREES						
Acacia cyclopis			?	3	Unusual species (origin unknown)	PH/NA
Acacia longifolia (latifolia)	Golden Wattle		?	3	Fast but short lived, potentially seedlings from original two at Courtyard Entry.	H/M/RP
Grevillea robusta	Silk Oak		0	2	Seedling from trees planted by neighbor E. Killingsworth. Constant conflict with power lines, topped several times.	PH/RM
Heteromeles abutifolia	Toyon		?	4	Seedlings from drive planting	H/MR/PS
Prunus Sp.	Flowering Peach		0	2	Planted by neighbor E. Killingsworth	H/M/RP/PS
Schinus molle	California Pepper		?	3	SEEDLING ?	H/M/RP/PS/PDC
Olea europaea			0	1	SEEDLING ALLOWED TO DEVELOP	H/M/RP/PS
SHRUBS						
Rhus ovata	Sugar Bush		?	1	SEEDLING ALLOWED TO DEVELOP	H/M/RP/PS
VINES & GROUNDCOVER						
Lantana montividensis	Trailing Lantana		0		PLANTED BY NEIGHBOR E. KILLINGSWORTH	H//M/RP/FT/AI
Thunbergia grandiflora	Sky Flower	SPRN. PL. L.C.R	2	4	PLANTED 4/95 (qty 5) HISTORIC LOCATION UNKNOWN	H/M/RP
Vinca major	Periwinkle		0		PLANTED BY NEIGHBOR E. KILLINGSWORTH	PH
Hedera canariensis	Algerian Ivy		0		PLANTED BY NEIGHBOR E. KILLINGSWORTH	NH/RM
PERENNIALS						
Pelargonium hortorum	Geranium		?	1	?	PH/AI

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Area: PALMS BACKYARD 2 Page: 1

Input: 9-2-98
Edit: 9-2-98

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BOTANICAL NAME	COMMON NAME	DOCUMENTATION	HIST. QUAN-TITIES	EXIST. QUAN-TITIES	SIGNIFICANT COMMENTS	RECOMMENDATIONS FOR FUTURE
PALMS						
Phoenix canariensis	Canary Island Date Palm	Los Fierros March 1967 CHP0627-1935	0	1	Very popular to the time period.	H/M
Trachycarpus fortunei	Windmill Palm		0	1	Planted by City, by April 1973. Replaced Tetrapanex, available SPRN 1930.	PH/M
Washington robusta	Mexican Fan Palm	RDC-PLAN, SPRN, P.PL CNP00013	3	3		H/M/RP

BOTANNICAL NAME	COMMON NAME	DOCUMENTATION	HIST. QUAN-TITIES	EXIST. QUAN-TITIES	SIGNIFICANT COMMENTS	RECOMMENDATIONS FOR FUTURE
TREES						
Heteromeles arbutifolia	Toyon		0	3		PH/M/RM
Robinia pseudoacacia	Black Locust		6-12	3	No proof of installation date. Design detail for perimeter.	H/M/RP
Schinus molle	California Pepper		0	1	S. Dudley remembers it here	PH/M
Schinus terebinthifolius	Brazillian Pepper		0	1		PH/M/PDC
Ulmus parvifolia	Elm		0	1	Suckers from V.C.C.	PH/RM
SHRUBS						
Cistus purpureus	Rock Rose		0	3	Added 1992	PH/RM/N
PERENNIALS						
Chasmanthe aethiopica			0			PH/AI/FT/RP
Chrysanthemum maximum	"Miss Muffet" Shasta Daisy		0	1	Added 1992	PH/AI/FT/RP
Coreopsis auriculata"Nana"	Tickseed		0		Added 1992	PH/AI/FT/RP
Cuphea ignea	Cigar Plant		0	2	Added 1992	PH/AI/FT/RP
Diplacus sp.	Monkey Flower		0	1	Added 1992	PH/AI/FT/RP
Gaillardia grandiflora "Goblin"	Blanket Flower		0	1	Added 1992	PH/AI/FT/RP
Geranium sanguineum			0	9	Added 1992	PH/AI/FT/RP
Haemanthus mutliflorus (Scadoxus mutiflorus, katherinae)	Blood Lily		0	2	Added 1992	PH/AI/FT/RP
Hypericum calycinum	Creeping St. John's Wort		0	5	Added 1992 Maintain	PH/AI/FT/RP

Lavatera assurgentiflora	Tree Mallow		0	1	Added 1992	PH/AI/FT/RP
Leonotis leonorus	Lions Tail		0	1	Added 1992	PH/AI/FT/RP
Limonium perezii	Statice		0	9	Added 1992	PH/AI/FT/RP
Lobilia laxtiflora			0	1	Added 1998	PH/AI/FT/RP
Mimulus puniceus	Red Monkey Flower		0	1	Added 1998	PH/AI/FT/RP
Phgelius African Queen			0	1	Added 1998	PH/AI/FT/RP
Plumbago auriculata	Cape Plumbago		0	1		PH/AI/FT/RP
Ranunculus asiaticus Red	Persian Ranunculus		0	100+	Added 1997	PH/AI/FT/RP
Sedum spectabile			0	3	Added 1998	PH/AI/FT/RP
Sollya heterphylla	Australian Blue Bells		0	1	Added 1992	PH/AI/FT/RP
Tagetes lemmonii			0	2	Added 1998	PH/AI/FT/RP
VINES						
Ipomoea tricolor	Pernnial Morning Glory				Oral tradition has them here 1931	PH/AI/FT/RP
Tropaeolum majus	Nasturiums	A.D.			Seeds sprouted when soil tilled in 1993	PH/AI/FT/RP

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Area: BACKYARD HISTORIC ROSES

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BOTANICAL NAME **ROSES**	COMMON NAME	DOCUMENTATION	HIST. QUAN-TITIES	EXIST. QUAN-TITIES	SIGNIFICANT COMMENTS	RECOMMENDATIONS FOR FUTURE
Alfred Colomb				1	Hybrid Perpetual 1865	H/M/PS
Archduke Charles				1	China <1837	H/M/PS
Blairii No 2				1	Hybrid China 1845	H/M/PS
Cardinal de Richelieu				1	Gallica 1840	H/M/PS
Catherine Mermet				1	Tea 1869	H/M/PS
Chromatella	Cloth of Gold				Noisette 1843	H
Comte de Chambord				1	Portland 1860	H/M/PS
Comtesse Cecile de Chabrillant				1	Hybrid Perpetual 1858	H/M/PS
Duchase de Bourban		DJG		1	Perpetual Tea	H/M/PS
Enfant de France				1	Hybrid Perpetual 1860	H/M/PS
Fortune's Double Yellow or Beauty of Glazenwood				1	China 1845	H/M/PS
General Washington				1	Hybrid Perpetual 1861	H/M/PS
Gloire de Ducher				1	Hybrid Perpetual 1865	H/M/PS
Gloire de Rosemanes		DJG				H
La Reine				1	Hybrid Perpetual 1842	H/M
Louis Philippe d'Angers' China				1	China 1834	H/M
Madame Hardy				1	Damask 1832	H/M
Marechal Niel		DJG			Noisette 1864	H/M
Mutabilis				1	China <1815	H/M
Old Blush				1	China 1752	H/M

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Quatre Saisons				1	China	<1848	H/M
Rosa moschata				1	Musk	1540	H/M/PS
Rose of Castille		DJG					H
Slaters Crimson China				1	China	1791	H/M/PS
Souvenir d'un Ami				1	Tea	1846	H/M/PS
Viridiflora		DJG		1	China	1833	H/M/PS

BOTANNICAL NAME	COMMON NAME	DOCUMENTATION	HIST. QUAN-TITIES	EXIST. QUAN-TITIES	SIGNIFICANT COMMENTS	RECOMMENDATIONS FOR FUTURE
TREES						
Acacia cyclopis			0	5	Unusual Species	PH/NA/M
Acacia longifolia (latifolia)	Golden Wattle		0	7		PH/M/RP
Carya illinoensis	Pecan		0	2	Seedling allowed to develop	
Eucalyptus cornuta lehmani		SPRN,PL-LCR, RDC PLAN	8	0	Demo'd for parking lot? Cornuta & lehmannii are two separate sp. Combined as sp. & var. on rcpt. & plan.	H
Heteromeles arbutifolia	Toyon, California Holly		0	5	Old seedlings	PH/M
Lagunaria patersonii	Primorose Tree		0	2	Seedlings from tree in backyard.	PH
Malus sp.	Crabapple	Dudley interview	1	0	Police used to park under it.	H/M
Olea europaea	Olive		0	1	Seedling from historic tree	PH/M
Pinus halepensis	Aleppo Pine	SPRN,RDC-PLAN,PL-LCR	2	0	Demo'd for parking lot	H
Pinus radiata	Monterey Pine	SPRN, PL-LCR,RDC-PLAN	1	1	Topped	H/M/RP
Pittosporum undulatum	Victorian Box		0	4	Seedling allowed to develop	PH/M
Robinia pseudoacacia	Black Locust				Seedlings allowed to develop but failing	PH/RM
SHRUBS						
Carpenteria californica	Bush Anemone		20	0	Consider replanting as it ties- in to California Native Garden.	PH/N
Rhus ovata	Sugar Bush		10	2		PH/RP
PERENNIALS						
Carpobrotus chilensis (Mesembryanthemum aequilaterane)	Ice Plant	PL-LCR	10	Ground Cover	M. aurantiacum is a name of no particular standing. The assumption is the list refers to this or the following iceplant	H/RP/FT/AI

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Carpobrotus edulis (Mesembryanthemum)	Ice Plant			Ground Cover		PH
Furcraea selloa						
Kniphofia uvaria (Tritoma)	Red Hot Poker		0	9	Planted in June 1995/ Available Burpee seed 1931	PH/N
Limonium perezii	Statice	PPL	0		Planted Aug 1994/ Available TBN 1937	H/M/RP
VINES						
Passiflora cearulea	Blue Passion Flower		0		Seedling that has spread out of control	PH

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BOTANNICAL NAME	COMMON NAME	DOCUMENTATION	HIST. QUAN-TITIES	EXIST. QUAN-TITIES	SIGNIFICANT COMMENTS	RECOMMENDATIONS FOR FUTURE
TREES						
Eucalyptus erythronema	Red Flowered Mallee	RDC-PLAN, SPRN	1	0	No Longer In Trade, Very Rare!	H/NA/RP
Ficus carica	Edible Fig		0	1	Not spec'd by RDC, but a former Fig in the serviceyard / private garden might be the origin.	PH
Maclura pomifera	Osage Orange	CHP0589 – 1931 DJG, RDC INVENTORY,	1	1	Remanent of Temple's garden, topped and suffers from an unstable canopy.	H/M/RP
Olea europaea	Olive	CHP0546 1845-1900, DJG, RDC INVENTORY,	1	1	Remanent of Temple's garden, topped, sprouted suckers that are developing into trunks.	H/M/RP
Pittosporum undulatum	Victorian Box	Orange scrap book Oct 1967	0	1	Seedling that developed into tree after 1955	PH/M/PS
Punica granatum	Pomegranate	DJG, RDC INVENTORY CHP0589 –1931	1	1	Remanent of Temple's garden.	H/M
Robinia pseudoacacia	Black Locust	CHP0186 –1931 RDC-PLAN & INVENTORY	1	0	An old remenant the design worked around.	H/M/PS
Schinus molle	California Pepper		0	1	Not RDC spec'd, seeding ? S. Dudley rembers it.	PH/M/PS
SHRUBS						
Aloysia triphylla (citriodora)	Lemon Verbena	CHP0589 –1931, RDC-PLAN, SPRN	1	0	Too shady to re-plant.	H/RP
Caesalpinia pulcherrima (Poinciana)	Red Bird-of-Paradise-Bush	RDC-PLAN SPRN	1	1	Re-planted Aug. 1994	H/M/RP
Carissa macrocarpa (grandiflora)	Natal Plum	RDC-PLAN, SPRN, CHP0698 –	6	0	Still in 1955, gone 1986.	H/RP

		1931-55				
Cantua buxifolia	Magic Flower	RDC-PLAN , SPRN	6	6	Re-planted March 1994, rare plant.	H/NA/RP
Griselinia littoralis	NCN		0	1	3 Added by City around 1991? Sp. Lucida avail. TBN 1937	PH/M
Osmanthus fragrans	Sweet Olive		0	2?	Added by City. Avail. Armstrong's 1931	PH/M
Rosmarinus officinalis	Rosemary	RDC-PLAN, SPRN	2	0		H/RP
Wigandia macrophylla	NCN	RDC-PLAN, SPRN, CHP0186 –1931	1	0	Very old fashioned plant, hard to get.	H/NA/RP
PERENNIALS						
Alpinia zerumbet (nutans)	Shell Ginger	RDC-PLAN, SPRN	2	5	Re-planted May 1998	H/M/RP/AI
Echium fastuosum	Pride of Maderia	RDC-PLAN, SPRN, CHP0186 - 1931	6	6	Re-planted Aug. 1994	H/M/RP/AI
Euphorbia pulcherrima	Poinsettia	RDC-PLAN	9	0	Too shady to re-plant.	H/RP/AI
Hypericum calycinum	Creeping St. Jon's Wort	RDC-PLAN, SPRN CHP0698 –1931	25	6	Re-planted Aug. 1984	H/M/RP/AI
Limmonium perezii	Statice	RDC-PLAN	25	12?	Re-planted Aug. 1984	H/M/RP/AI
Pelargonium hortorum	Common Geranium		0	6?	Possibley from Avis Bixby?	PH/M
Rolanda petasitis (Senecio)	Velvet Groundsel	RDC-PLAN, SPRN	3	25?	Original three have colonized.	H/M/RM
Trichostema lanatum	Whooly Blue Curls	RDC-PLAN, SPRN	5	0		H/RP/AI
Viola odorata	Sweet Violet		0	Mass	One of Avis Bixby's favorites!	PH/M
Yucca	NCN	RDC-PLAN	?	Clump		

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BOTANNICAL NAME	COMMON NAME	DOCUMENTATION	HIST. QUAN-TITIES	EXIST. QUAN-TITIES	SIGNIFICANT COMMENTS	RECOMMENDATIONS FOR FUTURE
VINES						
Ficus pumila (repens)	Creeping Fig	CHP0574 – 1950				PH
Unidentified Vines		CHP0685 - 1947	2			PH

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BOTANNICAL NAME	COMMON NAME	DOCUMENTATION	HIST. QUAN-TITIES	EXIST. QUAN-TITIES	SIGNIFICANT COMMENTS	RECOMMENDATIONS FOR FUTURE
TREES						
Acacia armata	Kangaroo Thorn	SPRN, P.L.-LCR RDC-PLAN	5	0		H/RP
Acacia cyclopis			0	4		PH/NA
Acacia longifolia (latifolia)	Golden Wattle		6	4	Seedlings or additions not per plan.	H
Acacia verticillata		SPRN, P.L.-LCR RDC-PLAN	5	1	Very rare, not in trade.	H/NA
Callistemon citrinus	Lemon Scented Bottlebrush		0	2		PH
Eucalyptus ficifolia	Red Flowering Gum	SPRN, P.L.-LCR RDC-PLAN	5	0		H/RP
Eucalyptus globulus	Blue Gum	SPRN, P.L.-LCR RDC-PLAN	3	1		H/M
Eucalyptus sideroxylon	Red Ironbark	SPRN, P.L.-LCR RDC-PLAN	4	2		H/M/RP
Eucalyptus sp.		CHP0566-'55	0	4		H/M/RP
Heteromeles arbutifolia	Toyon	RDC-PLAN, PL-LGR, SPRN	16	8		H/M/RP/PS
Lyonothamnius floribunus Asplenifolius	Catalina Ironwood	SPRN. PL, LCR PPL, RDC-PLAN	3	0	Demo'd when public Restroom went in. It's an Unsual plant	H/RP
Maytenus boaria	Mayten Tree	RDC-PLAN, PL-LGR, SPRN	1	1	Replanted 8/94	H/M/RP
Pinus canariensis	Canary Island Pine	RDC-PLAN, PL-LGR, SPRN	3	3	Avail. SPRN 1930	H/M/RP
Phoenix canariensis	Canary Island Date Palm		1	1		PH
Platanus racemosa	Calfornia Sycamore	RDC-PLAN, SPRN, PPL, PL-LCR	5	0		H/RP/PS
Quercus agrifolia	Coast Live Oak		0	2	Seedlings that developed.	

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BOTANNICAL NAME	COMMON NAME	DOCUMENTATION	HIST. QUAN-TITIES	EXIST. QUAN-TITIES	SIGNIFICANT COMMENTS	RECOMMENDATIONS FOR FUTURE
SHRUBS						
Buddleia madagascanariensis	Butterflybush	RDC-PLAN SPRN, PL-LCR	14	0	Hard to find	H/RP/AI
Buddlia asiatica	Butterflybush	RDC-PLAN SPRN, PL-LCR	10	0	Hard to find	H/RP/AI
Buddlia davidii (magnifica)	Butterflybush	RDC-PLAN SPRN, PL-LCR	12 - 14	0	Hard to find	H/RP/AI
Buddlia davidii	Butterflybush			3	Replanted 5/98	H/RP/AI
Ceanothus cyaneus	California Lilac	RDC-PLAN SPRN, PL-LCR	10	0	Hard to find	H/RP/AI
Chorizema cordatum	Heart-leaf Flame Pea		0	1	Test planting	PH
Fremontodendron mexicana (Fremontia)	Flannel Bush	RDC-PLAN, PL - LCR, SPRN	5	0		H/RP/AI
Genista monosperma Alba (pendula)	Bridal Veil Broom	RDC-PLAN SPRN, PL-LCR	7	0		H/RP/AI
Genista spachiana (fragrans)	Broom	RDC –PLAN, SPRN	13	0		H/RP/AI
Lycianthes rantonnei (Solanum)	Blue Potato Bush	RDC-PLAN, SPRN, P.P.L, PL-LCR	31	0		H/RP/AI
Rhus ovata	Sugar Bush	RDC-PLAN, SPRN, PPL PL-LCR	20	1		H/RP/AI
Streptosolen jamesonii	Marmalade Bush	RDC-PLAN, SPRN , PL-LCR	20	10		H/RP/AI
Tecomaria capensis (Tecoma)	Cape Honeysuckle	RDC – PLAN, SPRN, P.L.-LCR	12	0		H/RP/AI

PERENNIALS & ANNUALS						
Agave deserti			0	1clump	School Tours Use Spine Tips As Needle. Relocated '92	PH/N/DI
Diascia Ruby Field	Twin Spurs		0	16	Planted 11/97 Ruby Fields (Modern Variety) Genus Avail. Burpee Seed 1931	H/RP/AI
Linaria maroccana	Toadelax		0	36	Planted 12/96 Available Burpee Seed Cataolog 1931	H/RP
Trachelium caeruleum	Blue Lace Flower		0	5	Planted 5/98, Listed SWGB 1954	PH
VINES						
Parthenocissus quinquefolia (Ampelopsis)	Virginia Creeper		0	1	Listed in SCGB 1942	PH
Passiflora caerulea	Blue Crown Passion Flower		0	many	Seedling Allowed To Run Rampent	PH

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Area: COURTYARD ENTRY Page: 1 Input: 8-31-98 Edit: 9-1-98 Rancho Los Cerritos Historic Site, July 1998

BOTANNICAL NAME	COMMON NAME	DOCUMENTATION	HIST. QUAN-TITIES	EXIST. QUAN-TITIES	SIGNIFICANT COMMENTS	RECOMMENDATIONS FOR FUTURE
TREES						
Acacia longifolia (latifolia)	Golden Wattle	RDC-PLAN, SPRN, PL-LCR	6	0		H/M/DI
Pittosporum undulatum	Victorian Box	CHP0570 - 1955	0	1		PH/M/DI
SHRUBS						
Cassia didymobotrya (nairobensis)		RDC-PLAN, SPRN, PL-LCR	6	0	Old fashioned, out of trade	H/NA/RP
Cotoneaster franchettii		RDC-PLAN, SPRN, PL-LCR	10	0		H/RP
Cotoneaster horizontalis	Rock Cotoneaster	RDC-PLAN, SPRN, PL-LCR, CHP0363 1931-55	20	0		H/RP
Cotoneaster microphyllus	Rockspray Cotoneaster	RDC-PLAN, SPRN, PL-LCR CHP0363 1931-55	7	0		H/RP
Cotoneaster pannosus	Silver Leaf Cotoneaster	RDC-PLAN, SPRN, PL-LCR	5	0	No longer in trade.	H/NA/RP
Viburnum suspensum	Sandankwa Viburnum	RDC-PLAN, SPRN, PL-LCR CHP0363 1931-55	12	0		H/RP
PERENNIALS						
Tropaeolum majus	Nasturtium	A.D.			Sell seed packages in the gift shop	PH/AI
VINES						
Unidentified vine		CHP0363 1931-55				PH/M

Area: CHAINLINK FENCELINE Page: 1 Input: 8-31-98 Rancho Los Cerritos Historic Site, July 1998
FENCE ADDED BY CITY- NOT SHOWN ON PLAN Edit : 9-1-98

BOTANNICAL NAME	COMMON NAME	DOCUMENTATION	HIST. QUAN-TITIES	EXIST. QUAN-TITIES	SIGNIFICANT COMMENTS	RECOMMENDATIONS FOR FUTURE
TREES						
Acacia cyclopsis			0	2	Fast growing but short lived, origin unknown.	PH/NA
Acacia longifolia (latifolia)	Golden Wattle		0	7	Possible seedlings from courtyard entry.	PH/M/RM
Fraxainus velutina	Ash		0	?	Weed seeds blow in from neighbors	PH/RM
Heteromeles arbutifolia	Toyon			4	Seedlings allowed to develop	PH/RM
Pittosporum undulatum	Victoria Box			5	Seedlings allowed to develop	PH/M
Prunus lyonii	Catalina Cherry		0	1	Seedling allowed to develop	PH/M
Robinia psuedoacacia	Black Locust			22	Design detail, source unknown.	PH/M/RP
Quercus agrifolia	Coast Live Oak		0	1	Planted by City? Appropriate to Ca. Native theme.	PH/M/RM
Schinus terebinthifolius	Brazilian Pepper		0	2	Seedling allowed to develop	PH/M/RM
VINES						
Hedera canariensis	Algerian Ivy			Ground cover		PH/RM
Ipomoea tricolor	Perennial Morning Glory		?	Ground cover	Control, but has a long history on site.	PH/RM
Lonicera japonica	Honeysuckle		0	13	Installed by City	PH/RM
Tropaeolum majus	Nasturiums	A.D.	?	Mass	Sell packages of seeds in gift shop	PH/M

Area: BACKYARD VINES Page: 1

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BOTANNICAL NAME	COMMON NAME	DOCUMENTATION	HIST. QUAN-TITIES	EXIST. QUAN-TITIES	SIGNIFICANT COMMENTS	RECOMMENDATIONS FOR FUTURE
VINES						
Ficus repens (pumila)	Creeping Fig		0	1	Unknown origin, available SPRN 1930 catalog.	PH/M/RM
Rosa Banksia Alba Plena	White Lady Banks Rose	CMP000215-1981	0	1	City planted, A memorial donated by Juanita Williams May 1974. Available Armstrong Nursery Catalog 1931	PH/M
Rosa Banksia Lutea	Yellow Lady Banks Rose	CMP000215-1981	0	1	City planted, a memorial donated by Juanita Williams May 1974. Available Armstrong Nursery Catalog 1931.	PH/M
Rosa climbing		CHP0619-1934				PH/M
Vitis lubrusca	Concord Grapes	CHP0375-1931	0	7	City planted 1991? Not certain of species in photo.	PH/M
Wisteria floribunda Double (violaceo-pleana)				1	Available Armstrong's. Catalog 1931	PH/M
Wisteria sinensis	Wisteria	CHP0645-1940	0	2	Available Armstrong's Catalog 1931	PH/M

Area: BACKYARD TREES 2 Page: 1 Rancho Los Cerritos Historic Site, July 1998

BOTANICAL NAME	COMMON NAME	DOCUMENTATION	HIST. QUAN-TITIES	EXIST. QUAN-TITIES	SIGNIFICANT COMMENTS	RECOMMENDATIONS FOR FUTURE
TREES						
Acacia baileyana	Bailey Acacia	RDC-PLAN, SPRN,PL-LCR	1	0		H/RP
Arbutus unedo	Strawberry Tree	RDC-PLAN SPRN, PL-LCR, CHP0661 -1942	3	3		H/M/PS/RP
Bauhinia variegata	Purple Orchid Tree	RDC-PLAN, PL-LCR CHP0578 -1950 C.	1	1	Re-planted in celebration of Bixby Land Co. Centennial, August 1996	H/M/PS/RP
Bauhinia variegata Candida	White Orchid Tree	RDC-PLAN, SPRN, PL-LCR	3	0		H/RP
Carica pubescens (camdamariensis)	Mountain Papaya	PL-LCR RDC-PLAN	3	0	Per plan planted next to adobe wall @ library. Not there long.	H Not shown in CHP0637 1952.
Cercis occidentalis	Western Redbud		0	1	Planted by City, Possibly available from T. Payne	PH/RM
Citrus citranquat		RDC-PLAN, PL-LCR, P.P.L.	0	0	Extreme shade	H
Citrus hybrid		CMP00196	0	1	Three way cross including trifoliate orange and kumquat orange.	PH/RM
Citrus sinensis "Luc Gim Gong"	Orange	RDC-PLAN, PL-LCR, P.P.L.	1	1	No longer in trade.	H/M/PS/RP
Citrus sinensis "Ruby Blood"	Blood Orange	RDC-PLAN, PL-LCR, P.P.L.	1	0	Develops poor color in this zone.	H/RP
Citrus Sp.	Seedling Orange	CHP0639 - 1939	0	1	Seedling that replaced Blood Orange.	PH/RM
Citrus limon "Ponderosa"	Ponderosa Lemon	RDC-PLAN, PL-LCR, P.P.L. CHP0057a 1931-55	1	0	Possibly the "pumelo" of S. Dudley's memory.	H

Citrus Tangelo	Tangelo	RDC-PLAN, PL-LCR CHP0387 - 1931	1	1		H/M/PS/RP
Cocculus laurifolius		RDC-PLAN, SPRN, PL-LCR CHP0570 -1955	8	4		H/M/PS/RP
Cupressus sempervirens	Italian Cypress	DJG, SPRN, AD,RDC-PLAN & INVENTORY, PL-LCR , CHP0252 - 1872		5	3 Remnants from Temple's garden, 1 remnant of Cornell's , 1 planted by the City.	H/M/RP
Diospyros kaki "Hachiya"	Persimmons	RDC-PLAN, PL-LCR	1	1		H/M/PS/RP
Diospyros kaki "Tamipan"	Persimmons	RDC-PLAN, PL-LCR	1	0		H/RP
Erythrina Crista-galli	Cockspur Corral Tree	SPRN,PL-LCR CMP00054	1	1	RDC-Plan shows Euc. ficifolia in this location, no evidence it ever got planted here though.	H/M/PS/RP
Eucalyptus ficifolia	Red Flowering Gum	RDC-PLAN SPRN	1	0	No proof it ever got planted per plan. Erythrina crista-galli is the only tree there in memory.	H
Eucalyptus pulverulenta	Silver Mountain Gum	Los Fierros March 1967	2	1	Origin unknown	M/PS/RP
Feijoa sellowiana "Choiceana"	Pineapple Guava	CHP0194a -1934 PL-LCR	1	1?		H/M/PS/RP
Feijoa sellowiana "Coolidge"	Pineapple Guava	PL-LC2	1	0		H
Ficus macrophylla	Moreton Bay Fig	CHP0247 1896	2	1	Two trees planted in one raised bed, have grown into 1 speciman from early Bixby period.	H/M/PS

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Fortunella margarita "Nagami"	Kumquat	RDC-PLAN, PL-LCR, P.P.L. CHP0387 -1931	2	2	One of originals lost between 1977-1989. Replanted May 1993.	H/M/PS/RP
Ginkgo biloba	Maiden Hair Tree	CHP0673 - 1932	1	1	Planted by P. Dudley Sr. Burling is very unusual, avail. SPRN 1937	H/M/PS/RP
Heteromeles arbutifolia	Toyon	RDC-PLAN PL-LCR, SPRN	6	1	Original six lost, too shady, existing tree is on opposite side of yard.	H/M/PS/RP
Hymenosporum flavum	Sweetshade	RDC-PLAN PL-LCR, SPRN, CHP0381 - 1931	1	1	Girdling by its own roots, tree has survived but never thrived.	H/M/PS/RP
Jacaranda mimosifolia		RDC-PLAN PL-LCR, SPRN, P.P.L., CHP0673 - 1952	1	1	Not planted per plan, but suspect it is original.	H/M/PS/RP
Lagerstroemia indica	Crape Myrtle	Los Fierros - March 1967, Letter from Wm. Evens to Mrs. Chamberlin CMP00012	0	2	City installed after losing Thuja (1958). By March 1967, second was planted. Avail. Armstrongs 1931.	PH/RM
Lagunaria patersonii	Primose Tree	Los Fierros - March 1967 CHP0057 - 1934	0	1	Planted by Bixby at renovation per M. Byrkit.	H/RM
Ligustrum japonicum	Privet		0	1	Seedlings or City planted.	PH/M
Liquidambar styraciflua	American Sweet Gum		0	1	City planted, avail. Armstrongs 1931.	PH/RM
Liriodendron tulipifera	Tulip Tree		1	0	Planted by P. Dudley before 1941. Available SPRN 1930.	H/RP
Malus domestica "Beverly Hills"	Apple		0	1	City planted?	PH/RM

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Metrosideros excelsus	New Zealand Christmas Tree		0	8	Origin unknown.	PH/M Buffer, appropriate to era. Why remove?
Olea europaea	Olive	DJG,RDC-PLAN & INVENTORY CHP0294 - 1930	1	2	1 historic tree is dead. Ficus casts too much shade to replant. Seedling has been allowed to mature, opposite side of yard.	H/M/PS/RP
Olmediella betschlerana	Guatemalen Holly		0	5	Origin unknown, Very rare tree.	PH/M
Persea americana	Avocado	CHP0681 -1940s	0	1	Old seedling?	PH/M
Persea americana "Anaheim"	Avocado	RDC-PLAN, P.P.L.,PL-LCR	1	0	One of a small grove of avocado trees.	H/RP
Pesea americana "Dickenson"	Avocado	RDC-PLAN, P.P.L.,PL-LCR	1	0	One of a small grove of avocado trees.	H/RP
Persea americana "Fuerte"	Avocado	RDC-PLAN, P.P.L.,PL-LCR	1	0	One of a small grove of avocado trees.	H/RP
Persea americana "Ganter"	Avocado	RDC-PLAN, P.P.L.,PL-LCR, CMP00248	1	0	One of a small grove of avocado trees.	H/RP
Persea americana "Queen"	Avocado	RDC-PLAN, P.P.L.,PL-LCR, CHP0681 - 1940s	1	1	Possibly original, but very small. Not healthy, proximity of adobe pit is a liability as avocados are susceptible to root rot.	H/M/PS/RP
Pinus radiata	Monterey Pine	RDC-PLAN, SPRN, P.P.L.	1	0	Gone by 1967 Shaded completion	H
Pittosporum phillyraeoides	Willow Pittosporum	RDC-PLAN, SPRN, P.P.L., PL-LCR CHP0381 -1931	1	0	Still in by March 1967. Tough to grow, hard to find, but worth it.	H/M/PS/RP

Pittosporum undulatum	Victorian Box	RDC-PLAN, SPRN, PL-LCR, CHP0661 -1942	27	11	Original intent was privacy barrier at V.C.C. wall. At one time created the "green tunnel" from S. Dudley's memory.	H/M/PS/RP
Prunus campanulata	Taiwan Flowering Cherry	RDC-PLAN, SPRN, P.P.L.	1	0		H/RP
Prunus caroliniana	Carolina Cherry	RDC-PLAN, SPRN, P.P.L., PL-LCR, CHP0661 1942	6	9	Seedlings have been allowed to develop, creates a weed problem.	H/M/PS/RP
Prunus persica	Peach	CHP0639 - 1939	0	1	Long history of peaches in different parts of the garden. Existing tree City planted, but it is failing.	PH/RM
Prunus sanguinea plena	Flowering Peach	RDC-PLAN, SPRN, P.P.L., PL-LCR, CMP0031	2	2	Historic trees have failed; seedlings have filled in.	H/M/PS/RP
Punica granatum	Pomegranate	DJG, AD, RDC-PLAN & Inventory CHP0042 - 1930	2	2	Remnants of Temple's garden. Be aware the City filled trunks with concrete!	H/M/PS/RP
Robinia pseudoacacia	Black Locust	DJG, AD, RDC-PLAN & Inventory, Los Fierros March 1967, CHP0280 -1920s	8	16	A mix of pre-exsiting and planted trees from various periods.	H/M/PS/RP
Schinus molle	California Pepper	Los Fierros March 1967	0	1	Seedlings allowed to develop.	M/PS/RP Re-evaluate if avocados go back in!

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Schinus terebinthefolius	Brazilian Pepper	RDC-PLAN, Los Fierros March 1967, CMP00026	1	3	1 is historic, 2 are suckers resulting from massive pruning carried out by Dudleys.	H/M/PS/RP Replace Historic only.
Syzygium jambos (Eugenia)	Rose Apple	SPRN CHP0684 -1947?	2	1	Very unusual tree coveted by rare fruit growers.	H/M/PS/RP
Syzygium paniculatum (Eugenia myrtifolia)	Eugenia or Australian Brush Cherry	Los Fierros March 1967 CHP0673 - 1952 Letter from Wm. Evans to Mrs. Chamberlin.	1	0	Planted by City?	H/RP
Thuja occidentalis	Arborvitae	RDC-PLAN & Inventory, CHP0062b - 1934	1	0	Pre-existing but not necessarily from Temple. Lost in 1958 & re-placed with Lagerstromia.	H/RM
Tristania conferta	Brisbane Box	RDC-PLAN, P.P.L PL-LCR, SPRN, CMP00026	1	1	Might have armillaria.	H/M/PDC/PS/RM
Ulmus parvifolia	Elm	RDC-PLAN, P.P.L PL-LCR, SPRN	1	0	Lost post 1982.	H
Ziziphus jujuba "Lang"	Jujube	RDC-PLAN, PL-LCR	1	0	Lost prior to 1967.	H
Ziziphus jujuba "Li"	Jujube	RDC-PLAN, PL-LCR	1	0	Lost prior to 1967.	H

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BOTANICAL NAME	COMMON NAME	DOCUMENTATION	HIST. QUAN-TITIES	EXIST. QUAN-TITIES	SIGNIFICANT COMMENTS	RECOMMENDATIONS FOR FUTURE
SHRUBS						
Azalea indica "Alaska"		CMP00029- 1980	0	12	Planted by City 1990 Available prior 1950 per Nuccio's.	PH/M/RP
Azalea indica "Red Bird"			0	24	Planted by City 1990 Available prior 1950 per Nuccio's	PH/M/RP
Azalea indica "George Tabor"			0	7	Added to existing plants February 1994. Available prior 1950 per Nuccio's.	PH/M/RP
Azalea indica "Formosa"				1	Planted by City. Available prior 1950 per Nuccio's.	PH/M/RM
Brunfelsia pauciflora	Yesterday, Today and Tomorrow		0	3	Planted February 1995. Available Los Angeles 1920. The Grapevine Evans & Reeves Nursery Vol #7 Feb. NO. 10.	PH/M/RP This was specifically selected to meet shade, era and design criteria. Why RM and what should it be replaced with?
Buxus microphylla japonica	Japanese Boxwood	CHP0381-1931	2	2	Replanted May 1993, available SPRN 1930.	H/M
Calliandra haematocephala	Pink Powder Puff Plant		0	1	Planted by City 1983? May not be typical to period.	PH/M Only 1
Camellia japonica "Pink" #1	Camellia		?	?	Planted by City in place of roses due to shade.	PH/M
Camellia japonica "Pink" #2			?	?	Planted by City in place of roses due to the shade.	PH/M
Camellia japonica "Red"			?	?	Planted by City in place of roses due to the shade.	PH/M
Camellia japonica"White"			?	?	Planted by City in place of roses due to the shade.	PH/M

Cestrum aurantiacum	Orange Cestrum	RDC-PLAN, SPRN, CHPO376-1931	5	4	Uncommon shrub.	H/M/RP
Coleonema album (Diosma reevesii)	Breath of Heaven	RDC-PLAN, SPRN, P.L.- LCR	10	9	Planted 3 1993? September 1996 4 May 1998	H/M/RP
Cuphea hyssopifolia	False Heather		0	3	Planted May 1993, available TBN 1930.	PH/RM
Cotoneaster franchettii		RDC-PLAN, SPRN, PL-LCR	8	0	Replaced by Punica granatum "Nana" by March 1967- Los Fierros.	H/M/RP
Cotoneaster pannosa	Silver Leaf Cotoneaster	RDC-PLAN, SPRN, PL.- LCR	10	0	Very unusual species, no longer commonly in trade.	H/RP
Cotoneaster lacteus (Parneyi)	Parney Cotoneaster		0	1	Not planted per plan, suffering from Armellaria but surviving.	PH/PDC/RM
Fuchsia hybrida	Hybrid Fuchsia	RDC- PLAN, SPRN	6	0	Originals gone. Cestrum planted in their place.	H/RP
Fuchsia triphylla "Gartenmeister Bonstedt"			0	2	Planted by Fuchsia Soc. Post 1955	PH/M
Gardenia jasminoides augusta "Veitchii"			0	11	Planted by City. Available SPRN 1930.	PH/M
Gardenia sp.		SPRN	2	0	Mystery? Vetchii? Species unknown.	H/RP Which sp?
Grevillea thelemanniana	Hummingbird Bush	RDC-PLAN, SPRN, PL- LCR	12	0	Uncommon, not typical to trade.	H/RM

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Hebe andersonii (Veronica)	Veronica	RDC-PLAN, SPRN, PL- LCR Possibly CHP0387-1931	12	0	Very sensitive to root rot, original location extremely shady.	H
Hibiscus schizopetalis	Japanese Lantern	SPRN	0	8	Location of original three unknown, possibly Inner Courtyard. Re-planted March 1994, very old unusual species.	H/M
Jasminum mesnyi	Primrose Jasmine	Los Fierros March 1937, DJG	0	1	Pre-existing but not necessarily from Temple's garden.	M
Lantana camara "Pink & Yellow"	Lantana		0	9	Planted by City. Constant problems with insects due to monoculture conditions. (Too many planted too closely together in too much shade).	PH/RM
Lantana camara "Red & Yellow"	Lantana		0	2	Planted by City. Constant problems with insects due to monoculture conditions. (Too many planted too closely together in too much shade).	PH/RM
Lantana camara "Yellow"	Lantana		0	15	Planted by City. Constant problems with insects due to monoculture conditions. (Too many planted too closely together in too much shade).	PH/RM
Lantana camara "White & Yellow"	Lantana		0	1	Planted by City. Constant problems with insects due to monoculture conditions. (Too many planted too closely together in too much shade).	PH/RM
Lantana montevidensis	Lantana		0	Mass	Planted by City. Was completely out of control, now maintianing as a circular hedge around Syzigium jambos.	PH/RM

Ligustrum japonicum	Privet [hedge]		0	19	Planted by City. Privet hedge is appropriate to the site. Mixing with Pittosporum tobira is not.	PH/PS/M
Murraya paniculata (exotica)	Orange Jessamine	SPRN	2	4	Planted August 1984 to replace long gone Pyracantha. Shade is proving to be a problem. Original location unknown.	H/M/RP Hist. to site, selected to replace Pyracantha mimicing characteristics: evergreen white ples, red berries, if removed replace w/what?
Nandina domestica	Heavenly Bamboo	RDC-PLAN, SPRN, P.P.L. PL-LCR	6	15	Original gone, existing planted by the City.	H/M/RM
Nerium oleander "Petite Peach"	Dwarf Peach Oleander		0	3	Planted by the City, dwarf varieties are inappropriate to the time period.	PH/RM
Nerium oleander "Double Pink"	Oleander	Los Fierros March 1967, RDC-Plan & Inventory, D.J.G. CHP0617-1934	2	2	"Pre-existing" comment in Los Fierros believed to be inaccurate.	H/M
Nerium oleander "Single White"	Oleander		0	2	Planted by City of Long Beach Available SPRN 1930.	PH/M Only?
Photinia serrulata	Chinese Photinia	RDC-Plan, SPRN, PL-LCR, P.P.L. Possibly CHP0387-1931	3	0	Viburnum has replaced them- do not know when.	H/M/RP
Pittosporum tobira	Mock Orange Hedge		0	13	City planted.	PH/M/RM
Pittosporum undulatum	Victorian Box Hedge		0	3	Seedlings left to develop and pruned into a hedge.	H/M
Plumbago auriculata (capensis)	Cape Plumbago	RDC-Plan, SPRN, PL-LCR, P.P.L., DJG- Poss. CHP0387-1931	5	Mass +3	These have naturalized and must be controlled.	H/M/PS

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Punica granatum 'Nana'	Dwarf Pomegranate Hedge		0	19	Origin unknown, available SPRN-1930. Re-placed Pyracantha.	PH
Pyracantha angustifolia	Firethorn	RDC-Plan, SPRN, PL-LCR	15	0	Erythrina is where the plan shows this species.	H/RP Why replace, where? Requires full hot sun.
Pyracantha coccinea "Lalandei"		RDC-Plan, SPRN, PL-LCR	3	0	Punica granatum 'Nana' replaces these.	H/RP Why replace, where? Requires full hot sun.
Pyracantha koidzumii (formosana)		RDC-Plan, SPRN, PL-LCR	5	0	Syzigium Hedge, Peach & Apple trees replace these.	H/RP Why replace, where? Requires full hot sun.
Rhaphiolepis indica	Indian Hawthorn	CMP-No# 1977	0	15	City planted. Species indica available SPRN 1930.	PH/M/RM
Rosa Peace	Rose		0	1	City planted; introduced 1941.	PH/M/RP
Rosa Josephs Coat	Rose		0	1	City planted; introduced 1967.	PH/M/RM
Rose La Reine	Rose		0	2	Planted by Rosarians, divided 1994.	PH/M/RP
Rosa Souvenir de la Malmaison	Rose		0	1	Planted by Rosarians, relocated 1993.	PH/M/RP
Roses	Unknown	CHP0628-1935				RM
Syzygium paniculatum (Eugenia myrtifolia)	Eugenia hedge Austrailian Brush Cherry		0	50	Planted by City. Hedge is appropriate to era & design. Available SPRN 1930.	PH
Tecomaria capensis	Cape Honeysuckle		0	Mass	City planted. Available SPRN	PH/M/RP
Tibouchina urvilleana (Pleroma splendens)	Princess Flower	SPRN	2	1	Original location unknown, planted May 1993 relocated February 1995.	H
Viburnum suspensum	Sandankwa Viburnum		0	15	Original location unknown, planted by May 1993.	PH/M/RM

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Viburnum suspensum	Sandankwa Viburnum Hedge	CMP No# 1982	0	48	City planted, available SPRN 1930.	PH/M/RM

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BOTANICAL NAME	COMMON NAME	DOCUMENTATION	HIST. QUAN-TITIES	EXIST. QUAN-TITIES	SIGNIFICANT COMMENTS	RECOMMENDATIONS FOR FUTURE
PERENNIALS						
Adiantum sp.	Maidenhair Fern				Planted near arbor in February 1995. Available SPRN 1930 catalog.	H
Agapanthus africanus (umbellatus)	Lily-of-the-Nile	D.J.G. CHP0378-1931			Available SPRN 1930 catalog.	H
Agapanthus orientalis	Lily-of-the-Nile	D.J.G.			Listed SCGB 1954.	H
Agave attenuata		CHP0681-1940'S			SPRN 1930 catalog	H
Amaryllis belladonna	Naked Lady	D.J.G.			Available SPRN 1930 catalog. Planted near Cestrum 1996.	H
Anemone blanda "Blue Shades"	Wind Lower				Planted by arbor in Fall of 1994.	Heirloom bulb 1700 TDM
Anemone nemorosa	Wood Anemone				Planted in Cutting Garden in the Fall of 1997.	H
Antirrhinum majus "Rocket"	Snap Dragon	CHP00679-1940's			Alternating years planted by Central Brick Walk or Herb Garden November 1997. Available Burpee Seed catalog 1931.	H
Aquilegia caerulea	Columbine				Planted by Central Brick Walk Spring 1994. By Breakfast Room 1997. Available T.B.N. 1937 catalog.	H
Armeria maritima	Sea Pink				Planted by Central Brick Walk February 1994. Available T.B.N. 1937 catalog.	H
Asparagus densiflorus "Sprengeri"	Spenger Asparagus				Available SPRN 1930 catalog.	H

Asparagus setaceus (plumosa)	Fern Asparagus				Available T.B.N. 1937 catalog	H
Aucuba japonica	Japanese Aucuba	SPRN, PL-LCR, RDS-PLAN, CHP0619-1934	5	+		H/RP
Babiana stricta	Baboon Flower				Planted by Central Brick Walk Spring of 1998. Available R&CBGC 1927.	H
Bambusa oldhamii (Dendrocalamus latifolius)	Giant Clumping Bamboo	RDC-PLAN		0		H
Begonia "Richmondensis"					Planted along edge of lawn by Erythrina in 1993. Available T.B.N. 1937 catalog.	
Begonia semperflorens	Green Leaf Bedding Begonia				Planted along edge of lawn by Erythrina in 1993. Available T.B.N. 1937 catalog.	H
Bergenia crassifolia (Saxifraga)	Winter Blooming Bergenia	P.P.L. CHP0646-1942			Planted under Tangelo February 1994. Existing clump in Strelitzia bed by gate to Forecourt.	H
Billbergia nutans	Queen's Tears				Donated by LBCC; planted near end of arbor 1993. Available TBN 1937 catalog.	H
Canna indica	Indian Shot				Very old-fashioned perennial, no longer commonly in trade.	H
Canna hybrida "Ambassador"?	Red Canna Lily	CHP0656-1942		0	Armstrong's 1931 catalog.	H
Cerastium tomentosum	Snow-in-Summer				Planted either side of Central Brick Walk in 1993. Available TBN 1937.	H
Cereus peruvianus	Night Blooming Cactus	CMP000197			The only cactus on site, believed to have been added post 1955.	PH/IC
Chasmanthe / Gladiolus Watsonia		CHP0661-1942			Photo shows leaves that could be any of the three listed.	H

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Chrysanthemum maximum "Alaska"	Shasta Daisy	CHP062b-1934			Planted clumps in both beds west side of lawn 1993. "Alaska" listed SCGB 1942.	H
Chrysanthemum moriofolium		CHP0651-1942			Listed is SWGB 1954.	H
Cleome hasslerana	Spider Lily				Planted in Cut Clower Garden in the Spring of 1995. Needs more sun. Available Burpee Seed Catalog 1931.	H
Clivia miniata		CMP000139-1982			Available TBN 1937.	H
Consolida ambigua (Delphinium ajacis)	Larkspur				Planted December 1996. Available Burpee Seed catalog 1931.	H
Convolvulus mauritanicus	Ground Morning Glory	P.P.L., SPRN, Photo			Planted on either side of Central Brick Walk in April 1998. Look for photo showing similar flower in same bed.	H
Cycas revoluta	Sago Palm	CMP000139-1982			City added. Available TBN 1937.	H
Cyperus alternifolius	Umbrella Plant	CHP0515-1937			Available SPRN 1930 Catalog.	H
Delphinium belladonna	Delphinium	CHP10618-1934			Planted in West Bed February 1994, Trampled in Easter Egg Hunt. Following year installed hemp rope barrier. TBN 1937 catalog.	H
Dianella tasmanica		CHP0057-1931-55			Photo might be Dianella or Liriope gigantea. Planted in Cut Flower Garden April 1998.	IC
Dianthus Caryophyllus	Carnation	CHP0620-1935			TBN 1937.	H
Digitalis purpurea	Foxglove	CHP0057-1931-55			Photo might be Digitalis. Planted at steps to Weekend Gate. February 1995.	IC
Echium fastuosum	Pride of Madeira				Available TBN 1937.	H

Endymion hispanicus (Scilla, Hyacinthoides)	Spanish Blue Bells				Sprouted first time in staff memory after tilling the ground in 1992. Available R&CBGC 1927 catalog.	H
Francoa ramosa	Maiden's Wreath				Planted in Cut Flower Garden April 1998. Very old-fashioned plant. Listed in SWGB 1954.	H
Freesia hybrida	Freesia				Planted in Strelitzia bed by Forecourt and in Breakfast Room bed in Spring 1998. R&CBGC 1927 lists several varieties.	H
Geranium incanum					Planted in bed near Tangelo February 1994.	
Gerbera jamesonii	Gerber Daisy	P.P.L., SPRN, PL-LCR, CHP0661-1942			Hybrids today are significantly different to hybrids of the 30-40s. Photo might be of Gerberas.	H
Geum chiloense "Mrs. Bradshaw"		CHP0620-1935			Planted by gazebo in September 1996. Photo might be of Geum. Available TBN 1937.	H
Hedychium coronarium	White Ginger Lily	CMP00054-1968				PH
Hedychium gardneranum	Kahili Ginger					
Hemerocallis hybrida	Daylily				City planted. Available TBN 1937.	H
Heuchera sanguinea	Coral Bells				Planted near Punica in March 1994. Available TBN 1937.	H
Hyacinthus orientalis "Blue Jacket"	Hyacinth				Planted in combination with Daffodils by gazebo in Fall 1995.	IC

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Hydrangea macrophylla (hortensia)	Hydrangea	CHP0618-1934			City planted at base of Ginko and Northwest lawn bed. Added to lawn bed in February 1994. Planted near Breakfast Room in 1996. Per S. Dudley's 1940 memory. Available Armstrong's 1931.	H
Hymenocallis festalis "Zwanenburg"	Spider Lily				Planted in December 1997, species listed SCGB 1942 but research on variety is not complete.	H
Hypericum moseranum	Gold Cup Flower	RDC-PLAN, SPRN, CHP0645-1940	12	0	Planted in Private Garden 1998.	H
Iberis sempervirens	Perennial Candytuft				Planted February 1994. Available TBN 1937 Catalog.	H
Ipheion uniflorum (Brodiaea, Milla Triteleia, Leucoryne)	Spring Star Flower				Origin unknown but they have naturalized in the Cutting Garden.	IC
Iris germanica	Bearded Iris	D.J.G. CHP0636-1937			Available SPRN 1930.	H
Lavandula denata	French Lavender				City planted. Listed in SWGB 1954.	H
Liriope muscari	Big Blue Lily Turf	CHP0057a 1931-1955			Photo might be Liriope. Listed in SWGB 1954.	H
Lobelia erinus 'Crystal Palace'	Lobelia				Planted by Central Brick Walk and by gazebo in March of 1994. Variety 'Crystal Palace' is listed SCGB 1942.	H
Lobularia maritima	Sweet Alyssum				Planted as ground cover for contemporary roses in 1993. Available Burpee Seed 1931.	H

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Matthiola incana	Stock	CHP0632-1935			Photo might be Matthiola. Planted by Central Brick Walk alternate years November 1997. Available Burpee Seed 1931.	H
Muscari armeniacum "Blue Spike"	Grape Hyacinth				Planted by Weekend Gate in Fall 1994.	IC
Myosotis scorpioides	Forget-me-Not				Planted next to Tangelo 1997. Donated by neighbor Elizabeth Baker. Available Burpee Seed catalog 1931.	H
Narcissus "Yellow Cheerfulness"	Daffodil				Planted in combination with Hyacinthus by gazebo in Fall 1995. Available 1937 TDM.	H
Narcissus "Carlton"	Daffodil				Planted by back wall in the Fall of 1995. Introducedin 1927 per TDM.	H
Nephrolepis exaltata	Sword Fern				Donated by neighbor 1970s?	IC
Ornithogalum saundersiae	Chincherinchee	D.J.G.			Planted in Cut Flower Garden December 1997.	H
Pelargonium domesticum "Marie Robar"	Martha Washington Geranium	CHP0683-1947			Junior League Donation, May 1993. Planted by Central Brick Walk. Historic variety per Grandview Geranium.	H
Pelargonium hortorum	Common Geranium	CHP00645-1940			Available TBN 1937. Might be pictured in photo.	H
Phlox paniculata	Summer Phlox				Available TBN 1937.	H
Phlox subulata	Moss Pink				Planted by Central Brick Walk. February 1994. Listed SCGB 1942.	H
Phormium tenax "Variegatum"	Flax	CHP0657			Available T.B.N. 1937.	H

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Pimelea ferruginea	Pink Rice Flower	SPRN, PPL, PL-LCR, CHP0621-1932	5		Available SPRN 1930. Might be flower by try pot in Cut Flower Garden in photo.	H
Primula malacoides	Fairy Primrose				Planted in Cut Flower Garden December 1996. Listed SCGB 1942.	H
Primula obconica "Blue"	Primrose	CHP0621-1932			Planted by stairs to Weekend Gate November 1997. Listed SWGB 1954.	H
Romneya coulteri	Matilija Poppy	SPRN CHP0681-1940's	3			H
Scabiosa caucasica	Pincushion Flower				Planted north side of Central Brick Walk May 1996. Available TBN 1937.	H
Senecio hybridus (Cineraria)	Cineraria				Planted in Cut Flower Garden 1998. Listed SWGB 1954.	
Strelitizia reginae	Bird-of-Paradise	SPRN, P.P.L. RDC-PLAN, P-L-LCR, CHP0618-1934	2		Original two by Forecourt gate. City added three more at base of Lagunaria and another three by back wall near Herb Garden.	H
Tetrapanax papyiferus (Aralia papyrifera)	Rice Paper Plant	CHP0662-1936	1		City removed and planted Trachycarpus in its place	H
Tigrida pavonia	Mexican Shell Flower				Planted in Cut Flower Garden December 1997. Listed in SCGB 1942.	H
Trachelospermum jasminoides (Rhynchospermum)	Star Jasmine				Planted on either side of Central Brick Walk February 1994. Available TBN 1937.	H
Tropaeolum majus	Nasturtium	AD, CHP0571-1955			Available Burpee Seed catalog 1937.	H
Veronica sp.	Speedwell	CHP0376-1931			Might be plant in photo. Available SPRN 1930 catalog.	H
Vinca major	Periwinkle	DJG			Available TBN 1937.	H

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Viola odorata	Sweet Violet				One of Avis Bixby's favorites. Listed SCGB 1942.	H
Zantedeschia aethiopica	Calla Lily	CHP0678-1940s			Planted in bed below Ficus, too shady.	H
Zantedeschia elliottiana	Yellow Calla	Photo			Look for Dudley photo showing foliage	IC

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BOTANICAL NAME	COMMON NAME	DOCUMENTATION	HIST. QUAN-TITIES	EXIST. QUAN-TITIES	SIGNIFICANT COMMENTS	RECOMMENDATIONS FOR FUTURE
HERBS						
Allium schoenoprasum	Chives					PH/RM/IC
Allium tuberosum	Garlic Chives					PH/RM/IC
Aloe vera (barbadensis)	Aloe					PH/RM/IC
Aloysia triphylla	Lemon Verbena					PH/RM/IC
Ammi majus	Bishops Weed					PH/RM/IC
Aptenia cordifolia (Mesembry anthemun cordifolium)						PH/RM/IC
Artemisia absinthium	Wormwood					PH/RM/IC
Asclepias tuberosa	Butterfly Weed					PH/RM/IC
Borago officinalis	Borage					PH/RM/IC
Calendula officinalis	Calendula					PH/RM/IC
Capparis spinosa	Caper					PH/RM/IC
Carum carvi	Caraway					PH/RM/IC
Chelidonium majus	Greater Celandine					PH/RM/IC
Chenopodium ambrosioides	Epazote					PH/RM/IC
Chrysanthemum balsamita (Tanacetum)	Costmary					PH/RM/IC
Chrysanthemum parthenium	Feverfew					PH/RM/IC
Coix lacryma-jobi	Job's Tears					PH/RM/IC

Coreopsis auriculata "Nana"	Coreopsis					PH/RM/IC
Crocus sativus	Saffron Crocus					PH/RM/IC
Cymbopogon citratus	Lemon Grass					PH/RM/IC
Dianthus caryophyllus	Carnation					PH/RM/IC
Dipsacus sativus	Fullers' Teasel					PH/RM/IC
Foeniculum vulgare "Purpurascens"	Fennel					PH/RM/IC
Galium odoratum (Asperula odorata)	Sweet Woodruff					PH/RM/IC
Gaura lindheimeri	Gaura					PH/RM/IC
Hypericum perforatum	St. John's Wort					PH/RM/IC
Iberis sempervirens	Evergreen Candy Tuft					PH/RM/IC
Indigofera tinctoria	Indigo					PH/RM/IC
Iris germanica var. "Florentina"	Oris Root					PH/RM/IC
Lavandula dentata	French Lavender					PH/RM/IC
Lavandula multifida						PH/RM/IC
Lavandula stoechas	Spanish Lavender					PH/RM/IC
Laurus nobilis	Sweet Bay Laurel					PH/RM/IC
Marrubium vulgare	Horehound					PH/RM/IC

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Mentha spicara	Mint Spearmint					PH/RM/IC
Nepeta faassenii	Catmint					PH/RM/IC
Nigella damascena	Love-in-the-Mist					PH/RM/IC
Oenothera hookeri	Evening Primose					PH/RM/IC
Origanum majorana	Sweet Marjoram					PH/RM/IC
Origanum vulgare	Oregano					PH/RM/IC
Origanum sp.	Old Rancho Oregano				From J. Higerra McMahons families old rancho in MilipatasCalifornia.	PH/RM/IC
Prunella vulgaris	Self Heal					PH/RM/IC
Rosmarinus officinalis	Rosemary					PH/RM/IC
Salvia aurea						PH/RM/IC
Salvia officinalis	Sage					PH/RM/IC
Salvia sp.						PH/RM/IC
Sanguisorba minor	Salad Burnett					PH/RM/IC
Santolina chamaecyparissus	Lavender Cotton					PH/RM/IC
Stachys byzantina	Lambs Ears					PH/RM/IC
Symphytum officinale	Comfrey					PH/RM/IC
Tanacetum vulgare	Tansy					PH/RM/IC
Tanacetum vulgare var. "crispum"	Curly Leaf Tansy					PH/RM/IC
Teucrium chamaedrys	Germander					PH/RM/IC
Thymus citriodorus	Lemon Thyme					PH/RM/IC

Area: FUTURE BARNYARD & BARNYARD ENTRY 2 Page: 1 Rancho Los Cerritos Historic Site, July 1998

BOTANICAL NAME	COMMON NAME	DOCUMENTATION	HIST. QUAN-TITIES	EXIST. QUAN-TITIES	SIGNIFICANT COMMENTS	RECOMMENDATIONS FOR FUTURE
TREES						
Acacia longifolia (latifolia)	Golden Wattle		0	2	Planted in pots for Visitors Center June 1995.	PH
Carya illinoensis	Pecan		1	1	Tallest tree on site. Origin unknown, believed to be from the 1930 – 40s.	H/M/PS/RP
Heteromeles arbutifolia	Toyon	RDC-PLAN, SPRN, PL-LCR	10	4	California native.	H/M/PS/RP
Olea europaea	Olive		0	1	Seeding allowed to stay.	PH/M
Parkinsonia aculeata	Mexican Palo Verde	C 66.7 Note to Curator, Fredrica White	0	1	Two trees donated by D.B.Kenyon November 1965 have grown together into one speciman.	PH/RM
Podocarpus macrophyllus	Yew Pine		0	3	Planted in pots by City.	PH/RM
Populus fremontii		RDC- PLAN, PPL, PL-LCR, SPRN	5	0		H/RP
Prunus armeniaca	Apricot		0	1	Planted by early caretaker? Preserves sold in Gift Shop.	PH/RP
Prunus lyonii	Catalina Cherry		0		Seedlings from historic trees regularly try to develop.	PH/RP
Prunus salicina	Plum Santa Rosa		0	1	Planted by early caretaker? Preserves sold in Gift Shop.	PH/RP
Robinia pseudoacacia	Black Locust		0	1	Sucker/ seedling that has been allowed to develop.	
Schinus molle	California Pepper	RDC-PLAN, SPRN, PPL, PL-LCR, CHPO579-1950c.	1	2	Historic tree by garage lost to armellaria 1993? Two adult offspring on "Herb Hill" have shown stress but still have no sign at the crown of the disease.	H/RM/RP

Vitex angus-castus	Chaste Tree		0	1	Planted in Private Garden in May 1998.	PH/RM
SHRUBS						
Barleria obtusa			0	3	Planted in Private Garden May 1998.	PH/RM
Buddleia davidii	Butterfly Bush		0	1	Planted in Private Garden May 1998.	PH/RM
Cassia didymobotrya (nairobensis)			0	1	Propagated from seed and planted in pots by Visitors Center in 1995.	PH/RM
Cestrum nocturnum	Night Blooming Jessamine		0	1	Available Armstrongs 1931 catalog. Very popular fragrant plant of the period.	PH/RM
Cotoneaster franchetti	CHP0579	RDC-PLAN	8	0	Plan shows them a few feet away at Courtyard Entry. The photo shows the planting extending into this area.	H
Grevillea banksii		SPRN	3	3	Original location unknown. Planted in pots at Visitors Center May 1998.	H/M/PS
Grewia occidentalis	Lavender Star Flower	PL-LCR, PPL SPRN	0	3	Original location unknown. Planted in pots at Visitors Center June 1995.	PH/RM
Heliotropium arborescens (peruvianum)	Common Heliotrope	PL-LCR, SPRN	6	12	Original location unknown. Planted into planter boxes in Private Garden May 1998.	H/M
Ligustrum lucidum "ciliatum"	Privet – Hedge	PPL, RDC-PLAN CHP00566-31-55	72	38	The name ciliatum is applied to both species lucidum and tschonskii.	H/M/PS
Lycianthes rantonnei (Solanum rantonnetii)	Blue Potato Bush or Paraguay Nightshade	SPRN PDC-PLAN	8	3	Planted in pots by Visitors Center June 1995. Planted out into Private Garden in May 1998. Original location was along the drive.	H/M
Pittosporum tobira	Mock Orange		0	1	Seeding allowed to stay, available Armstrongs catalog 1931.	PH/RM

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Rosa californica	California Wild Rose		0	2	Donated by FRLC Linda Carlson. Planted on Herb Hill 1992, California native.	PH/RM
Rosa	Peace		0	1	City planted. Introduced in 1945 at conclusion of World War Two.	PH/RM
Rosa	Red		0	3	Planted by City	PH/RM
Rosa	Coral		0	1	Planted by City	PH/M
Tibouchina urvilleana (Pleroma)	Princess Flower	SPRN	0	1	Original location unknown. Planted in Private Garden May 1998.	H/M
VINES						
Lathyrus odoratus "Old Spice"	Sweet Pea		0	Varies	Planted in Private Garden February 1995. The original location unknown; one of Avis Bixby's favorites. This is an antique variety listed in SS.	H
Thunbergia gregorii	Orange Clock Vine	SPRN	0	3	Location of original 4 unknown. Planted in pots at Visitors Center June 1995.	H
PERENNIALS						
Achillea filipendulina	Fernleaf Yarrow		0	Ground Cover	Planted on Herb Hill as part of an Eagle Scout project in the late 1980s. Listed SWGB 1954.	PH/RM/IC/AI
Achillea millefolium "Rosea"	Rose Yarrow		0	Ground Cover	Planted on Herb Hill February 1995. Introduced in 1851 per SS.	PH/RM/IC/AI
Achillea millifolium	White Yarrow		0	Ground Cover	Planted on Herb Hill in 1997. The variety "The Pearl" is listed in the BBS 1930.	PH/RM/IC/AI
Agave attenuata		Photo		1	Planted in strawberry pot. A photo exists from the 40s placing this in the Inner Courtyard, have not located at this time.	H

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Alcea rosea (Althaea)	Hollyhock		0	Varies	Planted along Fence Line in 1996. Available Burpees Seed 1931. We sell seeds in Gift Shop.	PH/RM/IC/AI
Aloe vera	Aloe		0	Many	Divided from Herb Garden and planted on Herb Hill 1996.	PH/RM/IC/AI
Alstroemeria	Peruvian Lily		0	Ground Cover	Planted March 1995. Adding to the planting regularly from divisions of modern varieties donated by neighbor Elizabeth Baker. Species listed in SCGB 1942. Excellent cut flower.	PH/RM/IC/AI
Anemone coronaria "Lord Lieutenant"	Poppy Flowered Anemone		0		Planted in pots at Visitors Center in 1993. Heirloom Bulb per TDM.	PH/RP/IC/AI
Aquilegia flabellata "Blue Angel"			0	7	Planted in Private Garden in May 1998. Variety "Blue King" is listed in BBS 1930.	PH/RP/IC/AI
Aster			0	1	Planted in Private Garden in 1996.	PH/RM/IC/AI
Aurinia saxatilis (Alyssum)	Basket-of-Gold		0	3	Planted in Private Garden in May 1998. Variety "Luteum" listed in BBS 1930.	PH/RP/IC/AI
Centranthus ruber (Valeriana centranthus)	Red Valerian		0	9	Planted in Private Garden in May 1998. Listed SCGB 1942. Very old-fashioned perennial, good cut flower.	PH/RP/IC/AI
Cosmos bipinnatus "Sensation"	Cosmos		0	12	Planted in pots at Visitors Center February 1995. Variety "Sensation" introduced 1930 per SS.	PH/RP/IC/AI
Crassula sp.			0		A succulent planted in the strawberry pot at Visitors Center.	PH/RP/IC/AI

Dahlia "Betty Ann"			0	4	Planted in Private Garden April 1998. Introduced 1928 per research done by owner at Swan Island Dahlia.	PH/RP/IC/AI
Dahlia "Niky K."			0	3	Planted in pot at Visitors Center April 1998. Introduced 1949, per research done by owner at Swan Island Dahlia.	PH/RP/IC/AI
Dahlia "Bonnie Esperance"			0	30	Planted in Private Garden April 1998. Introduced 1948 per research done by owner at Swan Island Dahlia.	PH/RP/IC/AI
Gasteria ernesti-ruschi			1	1	Another succulent planted in the strawberry pot at Visitors Center.	PH/RP/IC/AI
Goniolimon tataricum (Limmonium)	German Statice		0	10	Planted in the Private Garden May 1998. Old-fashioned cut and dried flower.	PH/RM/IC/AI
Helianthemum nummularium "Rasberry Ripple"	Sun Rose		0	3	Planted in the Private Garden May 1998. Old-fashioned plant, new variety.	PH/RM/IC/AI
Helianthemum nummularium "Shot Silk"	Sun Rose		0	4	Planted in the Private Garden May 1998. Old-fashioned plant, new variety.	PH/RM/IC/AI
Helianthemum nummilaruim "Yellow"	Sun Rose		0	4	Planted in the Private Garden May 1998. Available SPRN 1930.	PH/RM/IC/AI
Hypericum calycinum	Creeping St. John's Wort	SPRN		8	Planted in the Private Garden May 1998. Original planting in Forecourt.	H/IC/PH/RM/AI
Hypericum moseranum	Gold Flower	SPRN	0	8	Planted in the Private Garden May 1998. Original 12 were located in Backyard.	H/IC/PH/RM/AI

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Iris germanica (purple)	Bearded Iris		0	6	Planted in the Private Garden May 1998. Very old-fashioned style.	PH/RM/IC/AI
Lamium maculatum "Shell Pink"	Dead Nettle		0	3	Planted in the Private Garden May 1998. Old-fashioned plant.	PH/RM/IC/AI
Lavandula sp.	Lavender		0	6	Planted by Eagle Scout project on Herb Hill in the late 1980s.	PH/RM/IC/AI
Lavandula dentata	French Lavender		0	1	Planted by Eagle Scout project on Herb Hill in the late 1980s. Listed SWGB 1954.	PH/RM/IC/AI
Lavandula multifida			0	1	Planted in Private Garden 1997.	PH/RM/IC/AI
Liatris spicata	Gay Feather		0	5	Planted Private Garden May 1998. Very old-fashioned cutting flower. Available Burpees Seed 1931.	PH/RM/IC/AI
Lychnis coronaria	Crown-Pink		0	3	Planted in the Private Garden May 1998. Old favorite, short lived but tends to re-seed. Available Burpees Seed 1931.	PH/RM/IC/AI
Mentha piperita	Peppermint		0	Mass	Planted on Herb Hill in 1994. Listed SWGB 1954.	PH/RM/IC/AI
Narcissus	Paperwhite		0		Planted in pots at Visitors Center 1992. Available BBB 1929.	PH/RM/IC/AI
Oenothera berlandieri	Mexican Evening Primrose		0	2	Planted in pots at Visitors Center June 1995.	PH/RM/IC/AI
Origanum vulgare	Mexican Oregano		0	1	Planted on Herb Hill by Eagle Scout Project late 1980s.	PH/RM/IC/AI
Pelargonium crippum	Lemon Scented Geranium		0	1	Planted in the Private Garden May 1998. Listed SCGB 1954.	PH/RM/IC/AI
Pelargonium graveolens	Rose Scented Geranium		0	1	Planted in Private Garden June 1995. Listed SCGB 1942.	PH/RM/IC/AI

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Pelargonium odoratissimum	Apple Scented Geranium		0	1	Planted in Private Garden June 1995. Listed SWGB 1954.	PH/RM/IC/AI
Pelargonium odoratissimum Nutmeg	Nutmeg Scented Geranium		0	1	Planted in Private Garden June 1995. Listed SWGB 1954.	PH/RM/IC/AI
Pelargonium peltatum	Ivy Geranium		0	1	Planted in pots by Visitors Center June1995. Listed SCGB 1942.	PH/RM/IC/AI
Pelargonium scabrum	Apricot Scented Geranium		0	3	Planted in pots at Visitors Center June 1995.	PH/RM/IC/AI
Pelargonuim tomentosum	Peppermint Scented Geranium		0	1	Planted in Private Garden May1998. Listed SCGB 1954	PH/RM/IC/AI
Penstemon gloxinioides "Midnight"	Border Penstemon		0	3	Planted in Private Garden May1998. Variety "Midnight" is a recent introduction, substituted for "Blue Gem" listed in TBN 1937.	PH/RM/IC/AI
Ranunculus asiaticus	Ranunculus Red, yellow, pink, white		0	150	Planted in pots by Visitors Center in 1995 & outside back gate to Private Garden in 1997. "Scheepers Supreme Strain" listed in R&CBC 1927.	PH/RM/IC/AI
Rehmannia elata (angulata)	Chinese Foxglove		0	3	Planted in May 1998. Available TBN 1937. Old-fashioned plant.	PH/RM/IC/AI
Rosmarinus officinalis "Prostratus"	Creeping Rosemary		0	6	Planted on Herb Hill by Eagle Scout project late 1980s. Available TBN 1937.	PH/RM/IC/AI

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Rosmarinus officinalis "Tuscan Pink"	Pink Rosemary		0	4	Planted on Herb Hill by Eagle Scout project late 1980s. Losing some due to suspected root rot attacking Schinus molle and / or shade.	PH/RM/IC/AI
Ruta graveolens	Rue		0	3	Planted on Herb Hill by Eagle Scout project late 1980s.	PH/RM/IC/AI
Salvia elegans	Pineapple Sage		0	1	Planted on Herb Hill in 1995.	PH/RM/IC/AI
Salvia leucantha	Mexican Sage		0	4	Planted on Herb Hill by Eagle Scout project late 1980s, added to it in 1996. Available TBN 1937	PH/RM/IC/AI
Salvia ?			0	1	Donated by Long Beach Herb Society 1994. Very unusual variety.	PH/RM/IC/AI
Sedum morganianum			0	1	Planted by weekend and Private Garden Gates May 1998.	PH/RM/IC/AI
Sedum telephium "Autumn Joy" (hylotelephium)			0	3	Planted in Private Garden May 1998. Have not confirmed introduction date of this variety.	PH/RM/IC/AI
Senecio cineraria	Dusty Miller		0	3	Planted in pots at Visitors Center June 1995. Very popular accent plant to the period.	PH/RM/IC/AI
Thymus praecox coccineus	Mother-of-Thyme		0	10	Planted in Private Garden May 1998. Available Burpee Seed 1931.	PH/RM/IC/AI
Trachelospermum jasminoides (Rhynchospermum)	Star Jasmine		0	2	Planted in pots at Visitors Center June 1995. Listed SCGB 1942.	PH/RM/IC/AI
Tropaeoloum majus	Nasturtium	A.D.	?	Count-less	Seedlings germinated naturally after tilling the ground by incinerator and Weekend Gate. Seeds are sold in the Gift Shop. Available Burpee Seed 1931.	H/RM/IC/AI

Tulbagaia volaceae	Society Garlic		0	60	Divisions planted on Herb Hill 1995 donated by Joan Twedell, neighbor and FRLC. Available SWGB 1954.	PH/RM/IC/AI
Verbena bonariensis			0	7	Planted in Private Garden May 1998. Introduced 1726 per SS.	PH/RM/IC/AI
Watsonia pyramidata	White		0	12	Planted on Herb Hill 1994. Donated by FRLC Nancy Neely. Available R&CBC 1927.	PH/RM/IC/AI

5.7 LANDSCAPE MAINTENANCE SERVICE ROUTINE MAINTENANCE

RANCHO LOS CERRITOS HISTORIC SITE
Landscape Maintenance Service
Routine Maintenance

General Maintenance

-- Complete policing of all areas weekly, including landscaping, pathways, flower beds, driveways and parking lots, to remove litter and meet safety and maintenance needs.

-- Complete removal of weeds on a continuing basis to prevent establishment. Weeds shall be controlled by hand and approved mechanical or chemical methods.

-- Pathways to be cleared of obstructions and weeds; apply decomposed granite as required to ensure safe walkways.

-- All clippings, trimmings and other debris shall be placed in compost pile, trash receptacles or removed from the site by the end of each work day. The site shall be left clean and free of obstructions.

-- Special care shall be taken to minimize truck traffic along the soil cement roadway.

-- Leaf blowers may not be used on the property.

-- Care should be taken so that noise levels are kept to a minimum during public hours and on Wednesday and Thursday mornings from October through mid-June, when school tours are in session.

-- The structure is constructed of adobe. In order to protect the adobe, splashing water and puddling must be avoided.

Contractor may be involved in any or all of the following landscape maintenance routines, as established through the monthly and daily schedule. The practices outlined below will serve as a guideline for work done on the premises.

Turf Maintenance

There are three separate lawn areas totaling approximately .30 acres. Lawn areas are both warm season turf, requiring reel-type mowers, and cool season turf requiring rotary mowers.

-- All lawns shall be mowed and edged as directed by the City at least once every two-three weeks. All grass clippings shall be collected and removed after each mowing.

-- All turf shall be cut to a height appropriate for the type of grass being mowed, approximately ¼ inch for warm season and 2 inches for cool season grass. Lawns shall be edged adjacent to all improved surfaces and shrub or flowerbeds.

-- De-thatching shall be performed as needed.

-- Lawn areas shall be aerated monthly due to the adobe soil structure, and always prior to fertilization. Soil cores are to be raked and removed, leaving the turf with a well-kept appearance.

-- Soil probes shall be used regularly to check moisture levels.

-- Lawns are fertilized with gypsum bi-annually in the Spring and Fall. Nitrogen will be added according to manufacturer's guidelines and only if soil analysis reports recommend it. Turf will be aerated prior to application, and followed by a heavy soaking irrigation.

-- Adequate watering of all lawn areas unless requested otherwise by the City due to drought conditions and mandated water cuts, or an increase of fungus activity.

-- Removal of leaves, fruit and debris from lawn areas as needed.

-- Fungus is to be controlled with water management and eradicated if possible.

-- Mower blades are to be sharp, clean and fungus free.

-- String trimmers are to be kept away from all plants and tree trunks and brick surfaces.

Tree, Shrub and Shrub Bed Maintenance

-- All shrubs and trees to a height of 15-feet shall be pruned regularly to the best health of the plant and to contain size in respect to species, size of planter or relative to surroundings; pruning is to maintain the natural growth habit of the plant.

-- Removal of ivy and other climbing plants from trees on a regular basis.

-- Adequate watering of all trees, shrubs and shrub beds.

-- Insect and disease control on all trees and shrubs as needed and under the direction of the City, using non-toxic or least toxic control available.

-- Prune to keep the natural shape of tree. No topping or pollarding will be permitted.

-- Branches removed shall first have an undercut incised before removal proceeds, leaving the bark branch ridge or collar intact. All cuts are to be clean, leaving no stubs or hat racks; no wound dressing shall be applied.

-- Pruning includes: removal of damaged or diseased growth, crossing branches, and branches that obstruct walkways to a height of 8-feet from ground. Water sprouts and suckers should be removed as soon as possible, with the exception of the two historic

Olea europaea.

-- Fertilization tablets will be added every 2-3 years, 2-feet on center, 12 inches deep, pending soil analysis.

Planting

-- Contractor may be required to plant a range of material including trees, shrubs, perennials, color, seeds, seedlings, and bulbs, per specifications of City.

-- Prior to planting, Contractor will properly prepare soil and may be required to install localized drainage system.

-- City shall provide all plant materials.

Flower Beds and Herbs

-- Weeding shall be performed regularly to avoid establishment; this shall be done without chemicals whenever possible.

-- Adequate watering of all irrigated bed areas, hand watering as directed by the City.

-- Routine repairs of erosion and other damage to slopes and borders.

-- "Dead heading" of spent flowers and stalks.

-- Fertilizing should be appropriate to plant, season and soil analysis, and shall be done in consultation with the City.

Path Maintenance

-- Decomposed granite shall be applied as needed to all pathways and to insure safety.

-- Rakes shall be used to clean up leaves and debris.

-- Paths are to be kept free of hazards and weeds.

-- Minor repairs shall be made to path borders with supplies provided by the City.

Irrigation System Maintenance

-- Any damage to public or private property resulting from excessive irrigation runoff shall be repaired by the Contractor at Contractor's expense.

-- Drains shall be cleared as necessary.

-- Minor repairs and adjustments to sprinklers shall be made.

-- A visual check shall be made weekly to ensure that all heads are functioning correctly.

-- All irrigation systems are to be run weekly and a visual check of each head will be taken at that time to ensure there is no clogging by dirt or grit.

-- Any malfunctioning head, valve or hose bib shall be corrected on the spot.

-- Any other malfunction is to be reported to the City immediately.

-- All required hoses are to be coiled neatly and hidden from view.

-- Sprinkler attachments are not to be left on the hose.

-- Soaker hose may be left *in situ* as long as it does not create a hazard or an eyesore.

-- Hoses will be operated from either hose bibs or quick coupler valves.

-- Quills are not to be left in quick couplers.

-- Soil probes should be used after watering to check depth of water penetration.

-- Determine length of irrigation period possible before run-off occurs. If adequate penetration is attained (minimum 6-inch depth), this period should be used in the program. If run-off occurs prior to 6-inch requirement, successive short intervals, repeated as necessary, are to be established.

Compost and Mulch

-- All grass and plant clippings, as well as fallen fruit, are to be composted in area provided. Dry leaves are to be used as mulch or composted. As organic matter breaks down, compost will be incorporated into cultivated soil.

-- Crab grass, nutsedge, plastic or food wrapper litter, as well as any seriously diseased plant material, are to be disposed of into refuse containers.

-- Compost is to be kept moist but not soggy, and turned over every 6-8 weeks. When the organic matter is fully decomposed the "finished " compost will be sifted or screened, placed in the sterilizer and steamed at 180 degrees for a minimum of 24 hours, and then stored in a closed bin to prevent seeds from blowing into the sterilized loam.

-- Vacant beds, once weed-free and broken up to a depth of 6-inches or greater, will be mulched with a 6-inch layer of clean tree trimmings provided by the City. The same

follows for beds partially planted, keeping mulch one (1) foot away from base of plant.

Weed Control

-- Much can be done to reduce both chemical control and manual labor; however, there will be certain areas where chemical application or hand weeding is necessary to maintain a first class condition throughout the landscape.

-- In as many areas as practical, soil cultivation in combination with mulch will be the primary weed control method exercised.

-- Chemicals will be used only as a last resort and never around the herb garden or fruit trees.

-- Special care will be taken around all plants, and manufacturers' directions will be followed in full. MSDS sheets must be filed with City prior to application.

Ground Cover

-- Lantana montevidensis throughout property shall be maintained to a height of 8-12 inches, leaving it clean and well kept. A 1-2 foot clearance shall be maintained around the base of all neighboring plants.

-- All ground cover shall be stripped from, and kept out of, trees and surrounding plants.

-- Watering shall be done weekly or less, depending upon rainfall; and accomplished by either manual irrigation or with hose and sprinkler attachment.

-- Vinca major, along drive by arroyo and around gazebo in back yard, shall be cut back annually.

-- Hedera in picnic area, front entrance, back yard and inner courtyard may be allowed to grow on fences and walls but only to a single layer of thickness.

-- Aptinia cordifolia in backyard shall be maintained to a height of 4-6 inches.

Soil

For the most part the soil contains a heavy amount of clay. Drainage is poor and moisture must be kept away from all historic structures. Aeration and cultivation is a must for all beds. Beds that are not yet planted will be cultivated and mulched to a depth of 6-inches. This will reduce weeds and improve soil. Compost and other amendments will be incorporated as they become available.

The grounds have been divided into the following areas:

I.	Backyard	Page 6
II.	Inner Courtyard	Page 8
III.	Forecourt	Page 9
IV.	Mexican Courtyard [future Orchard]	Page 11
V.	Picnic Area and Main (West) Parking Lot	Page 12
VI.	Arroyo	Page 12
VII.	Drive and Virginia Road Entrance	Page 13
VIII.	Private Garden	Page 13
IX.	Visitor Center Entrance	Page 14

I. BACKYARD

The Backyard includes turf, ground cover, beds, planters, flowering trees, shade trees, fruit trees and pathways of both brick and decomposed granite. Most beds are at least partially covered by manually operated irrigation systems. A few beds must be watered weekly by hose and sprinkler head attachments unless there is rainfall.

Hedges and Shrubs

Hedges include: Ligustrum, Pittosporum, Tecomaria, Viburnum, Punica, Syzygium and Raphiolepsis. Pruning will be exercised to maintain size restrictions of 3-4 feet, while keeping the natural look of the plant, avoiding flat tops, balls, squares, etc.

-- Most hedges are covered by the manual irrigation system. Others require soaker hoses or need a hose with a sprinkler attachment.

-- Fertilizer to be applied 1-2 times annually as called for by soil analysis.

Shrubs include: Azalea, Brunfelsia, Buxus, Calliandra, Camellia, Cestrum, Coleonema, Cotoneaster, Gardenia, Fuchsia, Hibiscus, Lantana, Murraya, Nandina, Nerium, Pittosporum and Plumbago.

-- Most watered by manual irrigation, either overhead spray or drip.

-- Some pruning needed to maintain clear pathways and open structure, and to control growth.

-- Fertilization to encourage flowering; add iron if soil sample requires.

Trees: include several varieties of shade, flowering and fruiting species.

-- For the most part these are in beds or planters already being watered because of other plantings.

-- Keep ground covers and vines 1-2 feet away from the trunks of all trees.

-- Keep low growing branches and suckers trimmed to an 8-foot height if over walkway.

-- Spray for insects with insecticide soap or least toxic control, and dormant oil on deciduous trees.

-- Fruit is harvested by the museum for preserves. Rake up all fallen fruit bi-weekly and compost.

-- Major tree trimming to be performed by others.

-- For feeding, use soil probe to create holes 12-16 inches deep, 24-inches on center around drip line. Insert 21-gram Agriform or equivalent tablet in each hole. This will be done every third year unless soil sample dictates otherwise.

Roses

-- Watered by manual bubbler system weekly.

-- Fertilized on a six (6) week basis with organic such as fish emulsion.

-- "Dead head" weekly.

-- Pruned annually at the appropriate season.

-- Spray with insecticide soap or light horticultural oil if needed.

-- Weeding by hand.

-- Several old-fashioned roses are planted on the grounds and have very different pruning requirements from the modern roses. Regularly water, weed and control pests; other needs are outside this contract.

Herb Garden

-- Watered by manual drip system.

-- Weeds are to be hand-pulled.

-- Under no circumstances are chemical controls for weeds or insects to be used in or around the herbs.

-- Only insecticide soaps or other non-toxic remedies are to be used near herbs.

-- Pruning consists of "dead heading" and pinching back.

Pathways: include brick-in-mortar, brick-in-soil and decomposed granite, lined with wood or brick.

-- Pathways are to be kept weed free.

-- Leaves removed twice a week or as required to be hazard free, and used elsewhere as mulch or compost.

II. INNER COURTYARD

The Inner Courtyard includes turf, ground cover, hedges, shrubs, perennials, trees, flagstone pathways, a water garden and a subterranean drain.

Water is to be restricted in this area due to potential damage to the freestanding adobe wall and the historic adobe structure. Avoid all high-pressure spray and utilize soaker hose when possible for hedges. The only sprinkler system currently installed covers the lawn area.

Hedges and Shrubs

Hedges: Buxus is to be maintained with a 30% face and a height of approximately 3 feet.
Shrubs: Chaenomeles, Prunus, Crassula, Raphiolepis and Lantana

-- Prune to open up and to maintain natural appeal of plant.

-- Fertilize to encourage flowering.

-- Watering shall be done by soaker hose.

-- Hand watering of planters.

Ground Cover

Hedera and Lantana are to be kept out of surrounding plantings of Buxus and Agapanthus as well as 6-12 inches away from the base of trees. Turf in this area is severely infested with nutsedge; preventing the spread of this weed is of the highest priority. Grass clippings will not be composted from this lawn; soil cores shall be thrown away.

Trees or Tree-like Plants include Orange, Tangerine, Pittosporum, Ilex., Platanus, Prunus and Strelitzia nicolai; all are located in beds.

-- Watering to be done by soaker hose.

-- Pruning to maintain open structures by removing suckers, broken fronds and dead or diseased growth.

-- Keep trunks clear (6-12 inches) of vines and ground cover.

-- Spraying for insects using least toxic method and non-toxic in fruit trees.
-- Keep fallen fruit raked up weekly.

-- Major tree pruning to be performed by others.

-- Fertilization program to be determined.

Pathways: Pathways include flagstone set in concrete and brick verandas.
-- Eliminate weeds breaking through flagstone.

-- Must be kept hazard free.

Drain
-- The subterranean drain must be flushed quarterly.

Pool
-- Feed water lilies monthly during growing season.

-- Skim litter from trees, etc., weekly.

-- Maintain water level daily.

III. FORECOURT

A small parking lot where the dumpsters are located, the Forecourt includes trees, shrubs, perennials, ground cover and vines. The area has direct access for equipment to the back yard.

Trees: include Olea, Schinus molle, Ficus carica, Osage Orange and Pittosporum.
-- Pepper, Osage and Olive are covered by a manual irrigation system; the Fig and Pittosporum must be watered by hose with sprinkler attachment.

-- Fruit shall be picked up weekly.

-- Prune suckers and waterspouts with exception of the Olive tree.

-- Keep ground cover and vines 6-12 inches away from trunks.

Shrubs: include Osmanthus, Cantua and Caesalpinia
-- Prune only to remove damage, diseased growth; the natural shape of the plant is to be maintained.

Perennials: include Alpinia, Pelargoniums, Senecio, Echium and Limmonium

-- All but one bed is covered by existing manual irrigation system. The other is to be watered by hose with sprinkler attachment.

-- Prune, "dead head" and pinch back to encourage new growth.

Ground Covers: include Violas and Hypericum

-- Only ½ the Violas are covered by manual irrigation; the rest must be cared for by hose with sprinkler attachment. Dead leaves shall be removed as needed.

-- Ivy and Lantana are to be removed if regeneration occurs.

-- Feeding as is appropriate to encourage flowering.

Vines: include Ficus and Hedera

-- Ficus ripens on brick wall; requires some control to remove old growth.

-- Hedera to be removed.

-- continued --

The following sections will be significantly impacted as the Master Plan is put into effect. Until then these guidelines are to be followed.

IV. MEXICAN COURTYARD *[to be restored to an ORCHARD per 1930s plans]*

Due to existing damage to the Spanish-tiled patio, this area is currently closed off to the public. Plantings include several fruit trees, shrubs, and planted pots; scope also includes walkways and overhang.

The water fountain does not currently work and is not included in this contract.

Trees

-- Rake up fallen fruit on a weekly basis, compost.

-- All fruit trees are on a manual irrigation system.

-- Pruning will be to remove sucker growth. Major pruning will be performed by others.

-- Spraying for insects must be done with non-toxic methods.

-- Keep beds weed-free.

-- Maintain clean mulch at base of trees.

Shrubs: include Azaleas, Camellias and Calliandra

-- All but Calliandra are watered by the manual irrigation system. Calliandra must be watered by hose and sprinkler.

-- Pruning will be minimal and then only to remove damaged or diseased growth. Calliandra is espaliered and requires regular trimming in approved manner.

-- Keep beds weed-free.

Potted plants: Banksia Rose

-- All hand watered.

Pathways: include both tile and decomposed granite (d.g.)

-- Keep weed free.

-- Maintain free of hazards.

Bougainvillea planted outside of wall is being trained onto overhang for shade. Tying needs to occur 2-3 times a year depending on rate of growth. Remove vertical branches as needed.

Litter from Bougainvillea is profuse and needs to be removed monthly.

V. PICNIC AREA & PARKING LOT *[to be reconfigured for the VISITOR CENTER, a CALIFORNIA NATIVE GARDEN and the BARNS & BARNYARD AREA]*

-- Picnic area and main parking lot include slopes, islands, soil cement drive, decomposed granite paths and asphalt.

-- Slopes include a wide variety of trees, perennials and assorted herbs and many California native plants.

-- Watering is done by manual irrigation system weekly or biweekly as needed.

-- Small islands survive upon annual rainfall. Fence line must be watered by manual drip irrigation.

-- Dry streambed must be kept weed and leaf clear monthly during dry season, and weekly during wet months.

-- Litter shall be picked-up and put into appropriate receptacles.

-- Pathways of decomposed granite shall be kept weed and litter free. Leaves can be incorporated into slope to act as mulch, or put into compost. Fruit from Catalina cherries and Olives are to be composted, not incorporated into mulch.

-- the island in the parking lot is not irrigated and must be watered by hose and sprinkler attachment at least 2-3 times a year, depending on annual rainfall.

-- Pest control around or on herbs is to be non-toxic. All other areas to be non-toxic or least toxic.

-- Parking lot is to have leaves removed monthly unless otherwise required. Litter is to be removed daily.

VI. ARROYO

-- Watered by manual irrigation system weekly.

-- Major brush clearance four times annually including, but not limited to, stripping ivy from tree trunks, removal of volunteer trees--especially Ash, Locust and Pepper--and removal of dry brush or dead and dying plants. Cut back the Lantana montevidensis.

-- Mulch to reduce weeds.

VII. DRIVE AND VIRGINIA ROAD ENTRANCE

-- For the most part this area is watered by manual irrigation system with one soaker hose and one hose with sprinkler attachment. Watered weekly.

-- Control ground cover and keep it clear from the trunks.

-- Mulch to reduce weeds.

-- Weed control.

-- Maintain height of Lantana 8-12 inches.

-- Litter pick-up weekly from roadside and drive.

VIII. PRIVATE GARDEN *[to become part of the BARNYARD]*

The Private Garden (area north of the kitchen in the north wing) includes fruit trees, roses, hedge, herbaceous and evergreen perennials, and turf.

-- Manual irrigation system.

-- Turf is warm season; mowed every two weeks. Maintain at 1/4-inch height.

-- Ligustrum hedge is to be pruned every 3-6 months or as needed to maintain the height of 6-8 feet.

-- Fruit trees are to be sprayed with non-toxic insect control, dormant oil and Bordeaux mixture.

-- Fertilize appropriately.

IX. VISITOR CENTER ENTRANCE *[to become part of the reconstructed BARNS & BARNYARD AREA]*

The current Visitor Center area, outside the 1930s garage, includes potted plants and trees.

-- Hand water twice weekly.

-- Hand weed as needed.

-- Notify City of evidence of pests.

-- Prune as needed.

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5.8 PROFESSIONAL TREE MANAGEMENT PROGRAM

PROFESSIONAL TREE MANAGEMENT PROGRAM

February 3, 1993

OBJECTIVES:

1. Inspect all environmental zones to establish a baseline of tree maintenance needs in a usable format for the management of responsible tree care.
2. Identify existing hazards and cultural problems.
3. Generate cost estimates based on current conditions.
4. Establish a prioritized implementation program with annual budgetary planning.

MANAGEMENT PHILOSOPHY :

1. To control size through heavy pruning will incur the highest maintenance costs. The best pruning approach is to allow the natural characteristics of the tree to develop. If the tree is to big for the location remove it to allow nearby trees to continue developing or replace it with a more suitable species.
2. The plan is organized primarily by species, implying that all trees of a particular species should be pruned at the same time. In general, this is the best approach. Efficiency and economy dictate that a full crew-day be utilized as often as possible. This means that a project which does not quite fill a day should be appended with work, where possible, to eliminate new problems elsewhere on the site. Conversely, a project which might require a few extra hours to complete some unessential trees within the species group might be cut short so as not to incur the unnecessary expense of partial day maintenance. Currently, a crew day effort costs $1170.00.
3. Removals are recommended where safety is involved. Dead trees can fall without prediction or provocation. Delay invites disaster. Those identified trees should be given highest priority.
4. Preservation of weak structure cannot always be corrected through pruning. Cable installation should be considered in high risk trees that must be retained. However, the combination of frequent pruning and cable installation are no assurance that tree failure will not occur.

SURVEY (Enclosure 1):

1. The survey and tally of trees is derived from a casual walk-through to provide general budgetary planning and to prioritize the needed work.
2. The Species list utilizes the most common name known by the local industry.
3. Focus was given to trees generally more than fifteen feet tall--requiring the worker's compensation insurance rating of an arborist. Therefore, the Quantity may not reflect all trees of the species on site.
4. The Action generally reflects thorough pruning which is the most labor intensive. Actual work descriptions might require less detail and some cost savings.
5. The Frequency is ideal to maintain the best possible species. The reality of budgets may require

extension of these periods. Those trees in high traffic/occupancy areas that have significant decay should not be extended if possible. On the other hand, maintenance of these frequencies is no guarantee against breakage.

6. The When is a suggested season. Best season is primarily based upon physiological needs, but may reflect only a cost effective strategy.

PROPOSED IMPLEMENTATION SCHEDULE (Enclosure 2):

1. This schedule is a proposed means to accomplish all near term needs, to allow transition to a regular schedule and to co-locate as much work as practical (for efficiency). In this case the calendar is left blank for your utilization. If you would like to indicate a tentative schedule by marking the calendar, I can easily convert to annual budget figures with inflation factors.
2. The plan is only a first look, which is suitable for use based upon the tree considerations of season and periodicity. As your selected tree contractor Finch Tree Surgery will interactively work with you to tailor the plan to also meet the needs of budget and preference.
3. The cost estimates are based upon an each tree evaluation and therefore should provide adequate budget planning. The efficiencies gained during full day maintenance occasionally bring actual costs below the budget.
4. Costs will vary over time primarily with annual inflation rates and the current unpredictable skyrocketing trend in insurance rates. Tree size should affect costs initially in the third trimming cycle for mature trees or third year for young trees given that frequencies are followed.
5. Priorities establish a means to implement sequentially the needs based upon the observed conditions and current season:
   Priority I....considered to be of immediate importance.
   Priority II...less urgent but nearly as important, allowing more time for budgeting and planning.
   Priority III..not urgent but should be anticipated in the coming years.
   Priority IV...non-essential but considered for a total tree care program.

CONTRACTOR SELECTION:

1. Must have adequate certifiable insurance for general liability and worker's compensation (specifically classified as a tree trimmer).
2. They are licensed in the City of Long Beach and hold an active California State Contractors License.
3. They capably handle a large volume of work and debris removal.
4. They have credible references (Enclosure 3).
5. The supervisor has excellent knowledge and is accessible.
6. A Certified Arborist is on staff.
7. They demonstrate adherence to safety and trimming standards as promulgated by the International Society of Arboriculture and the National Arborist Association (Enclosure 4).

Enclosure (1)

SURVEY BY TYPE

Rancho Los Cerritos

SPECIES	QTY*	ACTION	FREQ	WHEN	1993 COST
ACACIA (Entry)	31	Shape back and deadwood	2-year	Any	$180
ALEPPO Pine	1	Class I Fine Prune and light shape	4-year	NOV-FEB	$240
ASH, Shamel	~~2~~	Remove-hazard	Non-recur.	Any	$360
AVOCADO	52	Class I Fine Prune and light shape	3-year	OCT-MAR	$720
AVOCADO	~~0~~ 4	Remove-dead hazard	Non-recur.	Any	$180
BRAZILIAN PEPPER	?7	Natural Class I Fine Prune	3-year	Any	$1,680
CALIFORNIA PEPPER	11 ~~8~~	Natural Class I Fine Prune	4-year	Any	$1,776
CANARY ISLAND Pine	3	Natural Class I Fine Prune	5-year	NOV-FEB	$540
CATALINA CHERRY	11 ~~12~~	Natural Class I Fine Prune	3-year	Any	$1,440
CHERRY, caroliniana	11 ~~8~~	Natural Class I Fine Prune	3-year	Any	$960
COCCULUS	3	Natural Class I Fine Prune	2-year	Any	$0
CORAL TREE	1	Natural Class I Fine Prune	2-year	AUG-OCT	$420
CRAPE MYRTLE	2	Natural Class I Fine Prune	3-year	SEP-APR	$300
EUCALYPTUS	7 ~~10~~	Natural Class I Fine Prune	2-year	NOV-FEB	$3,000
EUGENIA (Surinam Cherry)	9 ~~8~~	Natural Class I Fine Prune	3-year	Any	$450
EVERGREEN PEAR	1	Natural Class I Disinfest Prune	2-year	JUL-AUG	$120
FICUS (Morten Bay Fig)	1	Natural Class I Fine Prune	3-year	MAR-AUG	$1,440
GINKGO (Maidenhair Tree)	1	Natural Class I Fine Prune	4-year	Any	$360
ITALIAN CYPRESS	4 ~~5~~	Natural Class I Fine Prune	4-year	Any	$1,260
JACARANDA	1	Natural Class I Fine Prune	3-year	Any	$180
LAGUNARIA patersonii	2	Natural Class I Fine Prune	4-year	Any	$720
LIQUIDAMBAR	1	Natural Class I Fine Prune	4-year	MAR-JUN	$120
LOCUST	39 ~~42~~	Natural Class I Fine Prune	2-year	Any	$7,308
OAK, Coast Live	~~4~~	Natural Class I Fine Prune	5-year	JUL-SEP	$180
OLIVE	3	Shape small, cut down large	3-year	JUL-SEP	$0
PALM, Canary Island Date	2	Remove dead fronds and seeds	2-year	Any	$780
PALM, Mexican	3	Remove dead fronds and seeds	2-year	Any	$180
PALO VERDE	1	Class I Restoration Prune	2-year	Any	$240
PECAN	2 ~~4~~	Natural Class I Fine Prune	3-year	MAR-JUN	$720
PITTOSPORUM undulatum	13 ~~16~~	Natural Class I Fine Prune	4-year	Any	$1,020
POMEGRANATE	3 ~~5~~	Natural Class I Fine Prune	2-year	Any	$0
SAPOTE	~~0~~ 5	Natural Class I Fine Prune	3-year	Any	$180
SYCAMORE, California	5 ~~6~~	Natural Class I Fine Prune	3-year	NOV-FEB	$768
TOYON	54	Natural Class I Fine Prune	2-year	Any	$0
TRISTANIA	1	Natural Class I Fine Prune	3-year	Any	$120
TULIP TREE	~~0~~ 4	Cut down-dead hazard	Non-recur.	Any	$480
Total Trees	146			Total	$28,422

* Quantities updated January 1999

Enclosure (1)

Definitions:

SPECIES	...the most common name locally used.
QTY	...the number of each species.
ACTION	...brief description of required work (see Survey text for more detail).
FREQ	...the number of years (or other period) before repeating action.
WHEN	...best season or time period to perform the action.
COST	...the price to perform action based upon full crew day utilization duri
Total	...the total of every line item cost if completed at one time.

5.9 TREE TRIMMING GUIDELINES

TREE MAINTENANCE & TRIMMING GUIDELINES

Rancho Los Cerritos Historic Site
Department of Parks, Recreation & Marine
4600 Virginia Road, Long Beach, California 90807

Rancho Los Cerritos Historic Site is a National, State and Local Historic Landmark. The site includes an 1844 adobe ranch house on 4.74 acres of landscaped property. There are over 450 trees including a Moreton Bay Fig, Italian Cypress, Brazilian and California Peppers, Catalina Cherries, Eucalyptus, Black Locusts, Pittosporums, a Ginkgo, a Coral Tree, Crape Myrtle and exotic fruit species. The trees date primarily from the 1840s and 1930s. They are considered a significant historical resource for their association with the site's history and with noted landscape architect Ralph D. Cornell, who redesigned the grounds in 1931. Every effort shall be made to maintain them in a healthy and safe state.

Preservation maintenance standards are guided by the U.S. Department of the Interior's Preservation Brief 36, "Protecting Cultural Landscapes."

The goal at Rancho Los Cerritos is to keep trees healthy. Where feasible, the best pruning approach is to allow the natural characteristics of the tree to develop instead of to control tree size. The following general conditions shall be followed when working with historic and specimen trees:

1. All work shall be guided by Rancho Los Cerritos staff (Horticulturist, Historic Sites Officer or designee).
2. The contractor must have a Certified Arborist on staff to guide work.
3. The contractor must be licensed in the State of California.
4. The contractor shall demonstrate adherence to safety and trimming standards as promulgated by the International Society of Arboriculture and the National Arborist Association.
5. All pruning shall be done in accordance with the ANSI A300 standard for tree pruning.
6. The contractor must have a minimum of two years experience working with historic trees and be sensitive to their special needs.
7. No large, heavy equipment may be used in the formal gardens, courtyard or on unpaved surfaces due to limited passage and possible damage to brickwork and root systems.
8. Tools shall be disease-free. Contractor shall sterilize tools after working on a diseased tree and before proceeding to the next specimen.
9. Trees shall be trimmed within their appropriate seasonal window, to be arranged with Rancho staff.
10. Access to trees will be via climbing and through the use of ropes. When working aloft, employees shall be required to wear tree workers' saddles and tie-in with an approved safety strap or rope.
11. No cleats may be used to climb trees.
12. Prior to climbing the tree, the tree shall be visually inspected to determine the safest method of entry.
13. Cut branches must be hand lowered to prevent damage to the tree itself and anything below; a line shall be attached to limbs which are too heavy to be controlled by hand.
14. Cut branches shall be removed from the tree prior to leaving the job site.

Rancho Los Cerritos Historic Site
Tree Maintenance & Trimming Guidelines, Page two

15. All material is to be chipped on site with material left at Rancho Los Cerritos for mulching purposes.
16. If a tree needs to be removed due to hazardous conditions, disease and/or death, this will include stump removal/grinding.

The primary objective in all tree maintenance operations is to maintain or improve tree health or structure. As such pruning guidelines will consist of one of the following types:

1. Crown Cleaning—the selective removal of one or more of the following: dead, dying, diseased, weak branches and watersprouts from a tree crown.
2. Crown Thinning—the selective removal of branches to increase light penetration, air movement, and reduce weight.
3. Crown Raising—the removal of the lower branches of the tree in order to provide clearance
4. Crown Reduction (shaping)—to reduce the height and/or spread of a tree.
5. Vista Pruning—selective thinning of framework limbs or specific areas of the crown to allow a specific view of an object from a predetermined point.
6. Crown Restoration—to improve the structure, form and appearance of trees that have been severely headed, vandalized, or storm damaged.

Specifications for pruning include:

1. Selective pruning is essential; trees may not be topped or pollarded.
2. Generally no more than one-fourth of the foliage of the canopy or individual limbs will be removed, and half the foliage should remain evenly distributed in the lower two-thirds of the canopy.
3. With crown reduction, the lateral should be at least one-third the diameter of the parent stem that is removed.
4. The preferred type of cut is a "thinning cut." This cut consists of removing a lateral branch at its point of origin, or shortening a branch or stem by cutting to a lateral large enough to assume the terminal role.
5. A heading cut should rarely be used on mature trees. If directed by site staff to use a heading cut to train young trees, shape terminal flowering trees, repair storm damage, etc., the cut should either consist of cutting a currently growing or one-year old shoot back to a bud; or cutting an older branch or stem back to a stub or lateral branch not sufficiently large enough to assume the terminal role.
6. When removing a dead branch, the final cut shall be made just outside the collar of live tissue. If the collar has grown out along the branch stub, only the dead stub should be removed. The live collar shall remain intact and uninjured.
7. To prevent damage to the parent limb when removing a branch with a narrow branch attachment, the final cut should be made from the bottom of the branch up.

5.10 RANCHO LOS CERRITOS TREE EVALUATION

RANCHO LOS CERRITOS TREE EVALUATION

Botanical Name: Ficus macrophylla

Tree #: 1-1-007

Location: Backyard E8/N8 **Section:** Lawn

Date: 8-6-96

Inspector: M. Barnidge & B. Dickison

Caliper at base: 33' **Caliper at chest height:** 7' 10"

Estimated height: 65 - 70' Clearance: 7' 8"

VULNERABILITY RATING:

____ + ____ + ____ = ____

Failure Potential + Size of part + Target Rating = Vuln'ity Rating

____ Immediate action needed
____ Needs further inspection
____ Dead tree

HISTORICAL ASSESSMENT

Era: ☐ Temple ■ Flint/Bixby ☐ Bixby ☐ P&R ☐ 1992+ **Year planted:** 1880c. Per plan? (Y) N

Photograph numbers: See attachment

Oral History/Interview: D. Humphreys int. 3/10/93, A. DeCigaran int. 7/11/92

Documentation: S. Dudley 4-11-96 photo encloser, S. Dudley 3-28-95, M. Liera 9-16-89 pg.28, A. Chamberlin 2/9/58 Pgs. 1 &5, RDC 585-8 1931

Comments:

TREE CHARACTERISTICS

Pruning History: ■ crown cleaned ☐ excessively thinned ☐ topped ☐ crown raised ☐ none

Value: ■ specimen ■ historic ☐ unusual ☐ screen ☐ shade ☐ other

TREE HEALTH:

Foliage color: ■ normal ☐ chlorotic ☐ necrotic **Foliage history:** ■ normal ☐ sparse **Leaf size:** ■ normal ☐ small

Annual shoot growth: ■ excellent ☐ average ☐ poor ☐ none **Epicormics:** Y (N)

Callus development: ☐ excellent ☐ average ■ poor ☐ none **Vigor class:** ☐ excellent ☐ average ☐ fair ☐ poor

Major pests/disease: None

SITE CONDITIONS:

Irrigation: ☐ none ■ adequate ☐ inadequate ☐ excessive ☐ trunk wetted

Soil problems: ■ drainage ☐ shallow ■ compacted ☐ disease center ☐ history of failure ☐ pH

TARGET

Use under tree: ☐ building ☐ parking ☐ street ■ pedestrian ■ recreation ■ landscape ☐ hardscape

Traffic Exposure: ☐ occasional use ☐ intermittent use ■ frequent use

COMMENTS & RECOMMENDATIONS

This was planted as two trees planted closely together in one raised bed. Majority of growth occurred post 1931. Excessive burls on north side of root system.

RANCHO LOS CERRITOS PHOTOGRAPH ATTACHMENT

Ficus macrophylla Tree # 1-1-007

Cerritos Historic Photograph		Cerritos Museum Photograph
CHP 0247	1896	CMP000191
CHP0335	1928	CMP000228
CHP0042	1930	CMP000233
CHP0047	1930	CMP000234
CHP0381	1931	CMP000012
CHP0617	1934	CMP00016
CHP0056	1934	CMP00018
CHP0628	1935	CMP00056
CHP0678	1940 c.	CMP00250
CHP0682	1940c.	CMP00053
CHP0658	1942	CMP00245
CHP0674	1952	CMP00249
CHP0573	1955	

Incident Report

Botanic Name Ficus macrophylla Tree # 1-1-007
Date 7-3-97 Photos 1 Location Backyard SectionLawn
Occurrence 54' branch gives way, hits Tangelo & Cocculus but still attached still attached to Ficus.
Outcome Cut limb free
Report: 11:00 hour Cheryl Harris a student intern informs me during staff meeting of a major branch down. Have 2 students cut away all small branches. When staff meeting is over I start cutting the large heavy branch into smaller sections until all that is left is the main branch still attached to the tree. Using 12' ladder & and tying off the branch with ropes I cut the branch free. I haven't the equipment to safely reach the stub to clean up torn tissue left behind.

Break occurred close to trunk where a cable ring had been installed a long time ago (no record kept). The cable has been gone for five years at least. A great deal of discolored tissue surrounds the ring, progressing internally both into the branch and toward the trunk. Diameter was 6-8"

Collateral damage was minor.

Signed: [signature]
Marie Barnidge-McIntyre

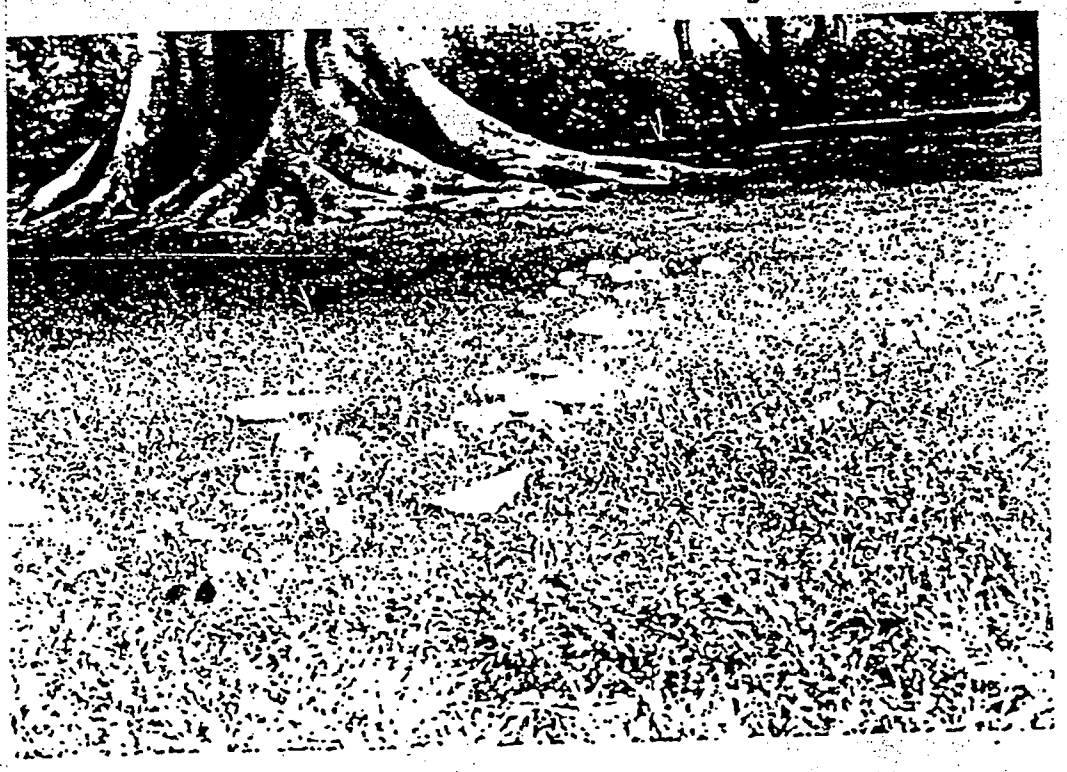


Incident Report

Botanic Name Ficus macrophylla Tree 1-1-007
Date Winter 92-93 Photos 2 Location Backyard Section Lawn
Occurrence Heavy rains - fungus activity
Outcome
Report: After several weeks of heavy rains the ground is completely saturated. The buttressing root system is holding in - fact overflowing with water. Used a five gallon shop vac to remove standing water from the reservoir the root system has created. Measured something over 75 gallons of water removed.

Toad stools have erupted on lawn in a definite pattern, appearing to follow roots. Toadstools are white , large - but no positive identification has been made.

Signed: _____



5.11 KNOWN SOIL CONDITIONS AT RANCHO LOS CERRITOS

Known Soil Conditions at Rancho Los Cerritos as of February 1999

General note:
Phosphorus has been found to be as much as 2 ½ times higher then normal in the backyard and private garden areas. This has not created an obvious problem, but typical chemical fertilizers should be avoided in order to prevent adding more phosphorus to the soil.

The following conditions have been identified and/or suspected:

Backyard:		
Turf	Positively identified	Plants affected
	Fairy Ring	South Lawn
Planter beds	Positively identified	
	Armillaria in the southwest bed of planter bordering lawn	Cotoneaster
	Phytophthera in the northwest planter beds bordering lawn	Azaleas
	Suspected but not proven	
	Phytophthera Activity Area/Avocado Grove	Avocados
	Not contagious; will not spread	
	Stump ground	Liriodendron
Forecourt:		
	Suspected but not proven	
	Verticillium Wilt or Armillaria	Olive
Drive:		
	Suspected but not proven	
	Armillaria	Eucalyptus
Inner Courtyard Entry:		
	Positively identified	
	Armillaria	Ornamental Peach
Garage / Visitor Center:		
	Armillaria	California Pepper
Herb Hill:		
	Suspected but not proven	
	Armillaria	California Pepper

2/1999
Prepared by Marie Barnidge-McIntyre

Converse Consultants
Over 50 Years of Dedication in Geotechnical Engineering and Environmental Sciences

CITY OF LONG BEACH
DEPARTMENT OF PUBLIC WORKS

WORK PLAN
FOR
LEAD-BASED PAINT HAZARD REDUCTION
AT
RANCHO LOS CERRITOS

Converse Project Number 99-41-290-01

OCTOBER 2, 2000

FOR

CITY OF LONG BEACH
Department of Public Works
333 W. Ocean Boulevard, Ninth Floor
Long Beach, California 90802

APPENDIX B

185 East Paularino Avenue, Suite B, Costa Mesa, California 92626
Telephone: (714) 444-9660 ◆ Facsimile: (714) 444-9640 ◆ e-mail: occonv@aol.com

Printed on Recycled Paper

WORK PLAN
FOR
LEAD-BASED PAINT HAZARD REDUCTION

A. SCOPE

1. ASSESSMENT OF HAZARDS: Obtain a Lead Inspection Report from the City of Long Beach (the City) or its designee and any historic or renovation information about painted surfaces and any evidence of situations in a building that may have caused or may contribute to lead poisoning. The Subject Property (Property) is a Registered Historical Landmark, and will require specialized removal and replacement procedure for many building components. If a lead inspection report is not available, obtain a third party lead inspection, identifying any Lead-Based Paint (LBP) within the proposed scope of work, with the City's approval and at City expense. The party conducting the lead inspection shall have a current certificate showing successful completion of a training course in lead inspection assessment, and is currently certified by the California Department of Health Services (DHS).

   A lead inspection report was completed by AMS on May 13, 1996. A summary of the LBPs identified at Rancho Los Cerritos is provided in Section K of this Work Plan.

2. HAZARD REDUCTION: Work includes removing loose and peeling lead-based paint from component items such as walls, ceilings, joists, window frames, and exterior facia, which will be affected by seismic upgrade activities. Some component parts may also require complete, intact removal. As the subject property is a historical landmark, all removed components must be replaced with identical components to the satisfaction of the City.

3. LABOR, MATERIALS AND EQUIPMENT: Provide all labor, materials tools, equipment, lifts, booms, services and incidentals necessary to perform work of lead paint hazard reduction.

   a) Materials shall be pure unadulterated, first quality and shall be delivered to the site in the original unbroken packages bearing the manufacturer's name, brand number and/or batch number, thereby identifying the contents. Any rejected materials shall be at once removed from the premises. Materials shall conform to all Federal, State and Local Air Pollution and Hazardous Material Laws.

   b) Deliver materials to the site in a timely manner to insure uninterrupted progress of the work.

B. GENERAL REQUIREMENTS

1. TERMS AND DEFINITIONS

a) Abatement – Includes the permanent correction, reduction or elimination of lead-based paint hazards.

b) Clearance Level – Maximum amount of lead present in an area. Amounts above this level will require clean up or abatement of the lead.

c) Daily Cleanup - Daily cleaning consist of removing visible dust and debris from work area using High Efficiency Particulate Air (HEPA) filter vacuum.

d) Encapsulation – Coating or sealing of the lead-based paint with some durable coating that is applied as a liquid to the painted surface, and must be at least twelve mils thick. Coating or sealing with lead free paint is not to be considered as an encapsulation.

e) Enclosure – Enclosing of the lead based paint coated surfaces with some durable substance such as drywall, plywood paneling, metal siding or other construction material.

f) Final Cleanup: Consist of three stages as described in final cleanup procedure.

g) In-Place Management – Priming and painting as a temporary repair of deteriorated lead based-paint coated surfaces until permanent abatement measures can be implemented.

h) Removal – Separation of the lead based paint from the substrate accomplished by wet sanding, dustless sanding, wet scraping, or chemical stripping using City approved chemical strippers.

i) Replacement – Removal of the entire existing lead-based paint coated component and installing new lead free components.

2. TRAINING AND CERTIFICATION: All workers and supervisors who perform the renovation work for LBP abatement, demolition, encapsulation and cleaning shall have current certificate showing they have successfully completed a training course in lead related construction and are currently certified by the DHS. DHS certificates must be submitted to the City Representative for the record. Workers and supervisors shall possess wallet certification cards at all times while on the work site. Comply with Division 1, Chapter 8 of CCR Title 17.

3. GUARANTEE / WARRANTY: The Contractor warrants and guarantees that all work executed and materials furnished under the Contract will be free from defects of material and workmanship for a period of following years:

a) Painted surfaces: three years, or as recommended by the manufacturer.

b) Encapsulated surfaces: As recommended by the manufacturer or twenty years.

c) Other enclosure or replacement materials: As recommended by the manufacturer or twenty years.

4. RECORDS: Provide the following to the City for record purposes:

a) Names and addresses of the party responsible for the demolition, encapsulation, enclosure and clean up work.

b) Location and description of the site and specific area where the lead based substances were abated through removal or encapsulation or enclosure.

c) The starting and completion date of the hazard reduction work.

d) A summary of the techniques used to comply with lead hazard reduction.

e) As-built drawing with notes in bold letters indicating surfaces where LBP's have been encapsulated or enclosed under this Contract.

f) Copies of all documents indicating that the renovation work has been performed in compliance with approved LBP abatement procedures.

C. METHODS OF HAZARD REDUCTION AND ENCAPSULATION

1. Encapsulation – Interior and Exterior: Coating sealer system.

a) Material - Elastic acrylic coating shall be heavy bodied and warranted by the manufacturer to be compatible with the substrate. Elastic acrylic coating shall be long lasting and resist cracking, peeling, algae, and fungus.

b) Submittal: Submit two samples 5-1/2" x 8" of the encapsulation material.

c) Execution: Encapsulation coatings shall be applied in accordance with the manufacturer's recommendations and the following conditions:

1) Remove surface dust and debris by scrubbing with detergent tri-sodium phosphate 5% - 10% solution and rinsing. Remove loose paint until a sound, intact edge is achieved. Remove and replace

loose plaster prior to the coating application. Proper safety procedures and lead dust control method must be in place.

2) Apply encapsulation coatings to the substrate in a continuous system to seal the surface being coated. The number of coats required and coverage rates shall be in accordance with the manufacturer's recommendations.

3) Areas that are lifting and peeling after application of the encapsulate coating shall be repaired by scraping until sound surface is obtained, feathering the edges and reapplying the encapsulate coating.

4) Remove or cover existing fixtures located on surface to be coated such as electric receptacles, switches, exhaust fans, and hardware.

5) Protection of Surfaces: Protect adjacent surfaces and existing fixtures from damage by coating systems. Damages to adjacent surfaces and existing fixtures due to lack of protection or improperly applied protection shall be repaired at the Contractor's expense.

2. Encapsulation – Interior and Exterior: Flexible wall coverings.

a) Materials: Wall covering shall be a reinforced fiber type, that forms a secure bond with the substrate, resistant to joint peeling and formation of mold. The wall covering system shall form a seal over the substrate to which it is applied and not allow the passage of substrate dust into the living environment.

b) Submittal: Prior to the start of work, submit to the City for approval, manufacturer's descriptive literature, two 5-1/2" x 8" samples of wall covering system and two samples showing neutral colors.

c) Execution: Install encapsulation covering in accordance with manufacturer's installation instructions, and the following provisions:

1) Remove foreign material by wash-down with a 5% to 10% tri-sodium phosphate solution. Remove loose plaster, loose paint, and loose wallpaper. Proper safety precautions and lead dust control methods must be in place.

2) Repair larger damaged areas flush with existing wall surface prior to installation of wall covering system.

3) Test for soundness of paint bond where required by application of 3/8" x 3" long bead of adhesive to the face of an 8" square of

gypsum wallboard and press wallboard square on to wall surface to be tested. Allow setting time recommended by adhesive manufacturer. Pull square away from wall. Paint bond is acceptable if the paper surface is separated from the wallboard square.

4) Repeat test procedure wherever wall surface is not acceptable.

3. Enclosure – Gypsum Wallboard (interior surfaces only), plywood paneling, other enclosures of exterior substrate.

a) Surface preparation: Remove foreign material by wash-down with a 5% to 10% high phosphate solution. Remove loose plaster, loose paint and loose wallpaper.

b) Affix warning labels stating surface contains "LEAD-BASED PAINT" to the surface prior to being enclosed. Labels shall be 3" x 5" and placed every four feet interval of surface being enclosed.

c) Install gypsum wallboard in accordance with the relevant section of specification.

4. Removal and Replacement of Lead-Based Paint Substrate.

a) Materials: Replace substrate with material of the same or better quality. Substrates include, but are not limited to doors, windows, moldings, casements, mantels, trims, skirting baseboards and associated hardware and fasteners.

b) Execution: Avoid damage to adjacent areas during the removal of substrates. Protect adjacent areas to substrates that are removed for replacement from damage. Damages shall be repaired or replaced at the Contractor's expense.

c) Substrates that are removed for replacement shall be wrapped for disposal in accordance with the applicable codes and sections of this specification.

d) After removal, the areas disturbed shall be abated, cleaned and tested in accordance with the procedures described in this specification.

e) As the subject property is a Registered Historical Landmark, all removed components must be replaced with identical substrate materials and components to the satisfaction of the City.

5. Abrasive Removers – Machine Sanders.

a) Machine Sanding Equipment: Sanders shall be capable of being fitted with HEPA filtration system.

b) Execution: Sanding shall only be performed on a flat surface that will allow the HEPA dust collection system to come into tight contact with the surface being sanded.

1) Remove lead-based paint down to the bare substrate surface. If the pigment can not be removed without damaging the substrate, notify the Consultant, Project Manager, or City Representative for further instructions.

2) Protect adjacent surfaces from damage from machine sanding. Damages shall be repaired at the Contractor's expense.

6. Chemical Removers - On-Site Chemical Removers, Off-site Stripping.

a) Chemical Stripping Removers: City approved chemical removers shall contain no methylene chloride products, be compatible with, and be harmless to the substrate. On masonry surfaces, chemical removers shall contain anti-stain formulation that inhibits discoloration. On interior surfaces, chemical removers shall not raise or discolor the surface being abated.

b) Chemical Stripping Agent Neutralizer: Use chemical stripping agent neutralizers on exterior surfaces only. Neutralizers shall be compatible with, and not harmful to the substrate. Neutralizers shall be compatible with the stripping agent that has been applied to the surface substrate.

c) Execution: Apply chemical stripping agents and neutralizers in accordance with the recommendations of the manufacturer and the following conditions:

1) Adhere to all health/safety regulations and other specification section requirements. Stripping agents shall not be allowed to penetrate wood or other fibrous substrates.

2) Remove the softened paint by scraping or wire brushing.

3) Protect adjacent areas from damage from stripping agent during the course of work. Damages to adjacent areas shall be repaired at the Contractor's expense.

d) Off Site Stripping – Structures of Historical Significance: Furnish all labor, materials and equipment required to remove and transport LBP

elements to an off-site location, remove LPB by chemical stripping, return elements to the job site, and reinstall.

e) Execution: Take extreme care in removing elements to be taken off-site to prevent damages or cause harm to those elements. In addition follow the following procedure:

1) Elements must be marked and identified using an inconspicuous engraving.

2) Hardware associated with an element shall be bagged and marked.

3) If required hardware shall be chemically stripped, cleaned or reconditioned.

4) Dispose of hazardous waste generated by the off-site stripping of LBP as required by regulations.

5) Do not transport hazardous waste to City property.

6) Protect the elements that are removed and adjacent areas from damage by removal and reinstallation of those elements. Damages shall be repaired or replaced at contractor's expanse.

7) Other enclosure methods: As approved by the City.

8) In-Place Management of Lead-Based Paint: Refer to article G. of this Work Plan.

9) Water Jet Washing: Remove LBP from exterior masonry substrate by water jet washing.

D. PERSONAL PROTECTION

1. Ensure that employees are protected in accordance with all Federal, State, and Local standards, particularly Cal-OSHA. Further standards of worker protection are described in detail in the Asbestos Abatement Work Plan for the Property.

2. Lead paint hazard reduction personnel shall have received lead paint medical screening and have been physician certified to work while wearing a respirator in accordance with local, state, and federal regulations.

E. CONTROL OF ACCESS

1. A person will not enter or remain in an area at any time during a lead abatement procedure that involves the on-site removal of lead paint, unless that person is:

a) The Contractor engaged in lead management procedures and his/her employees.

b) A State, County, City of Local enforcement official or his/her designee.

c) An Inspector who represents the City.

d) A Federal, State, City, or local official, or his/her designee engaged in research on buildings with lead paint.

F. CONTROL OF EMISSIONS AND DUST

1. WARNING SIGN DISPLAY: At each separate work area, wherever the treatment process is expected to break or disturb any lead-containing substances, display a warning sign in the following manner:

a) Except in emergency situations at least three days before removing or encapsulating lead paint, post signs immediately outside entrances and exits to the work area.

b) Keep the signs posted during demolition and cleaning.

c) Ensure that the signs meet the following description:

1) The sign indicates "WARNING: LEAD WORK AREA, POISON, NO SMOKING OR EATING" in bold lettering at least two inches high.

2) The sign is at least 20" x 14" and states the date and place of the lead abatement project.

2. INTERIOR CONTAINMENT

a) Seal the abatement area prior to any work of lead paint removal or disturbance by covering all floors, vents, windows and door openings into the abatement areas with a layer of 6 mil thick polyethylene sheets.

b) Install on floors minimum of two (2) layers of 6 mil thick polyethylene sheets, secured by waterproof tape and industrial staples where applicable.

c) The covering on windows, exterior doors and vents shall be installed from the outside to facilitate work on them from inside.

d) All polyethylene sheeting on floors shall be removed along with the debris and lead wastes prior to the clean up procedures.

G. WORK PRACTICES LEVELS FOR "IN PLACE MANAGEMENT"

1. Work practices for the disturbance of lead based paint will vary with task. Table 1 lists the work practices by level and the appropriate actions to be taken.

a) Level #1 – General Procedures – Requiring a minimal amount of preparation and worker protection because of negligible amount of lead dust, paint particles, chips and debris may result.

1) Use standard preparation and clean up procedures to protect worker and work area.

2) Place all waste in a disposal bag and seal bag – No bag shall weigh more than 25 pounds.

3) Contact Maintenance and Operations Area for pickup and disposal of hazardous waste materials.

b) Level #2 – General Procedures –Activities producing moderate amount of lead dust and debris as during wet scraping small areas of painted surfaces. Install plastic drop cloth ten feet on each side of the work and ten feet out from the building or unit for every story of the building to contain debris and dust.

1) Standard worker protection required.

2) Barricade tape or material may be placed to help control traffic.

3) Use standard cleaning method for cleaning.

4) Plastic drop cloths may be HEPA vacuumed and then disposed of in regular trash or reused.

5) Place all hazardous waste in a disposal bag weighing no more than 25 pounds and seal. Contact Maintenance and Operations Area to pickup and disposal of hazardous waste materials.

c) Level #3 -- General Procedures – Activities that generate substantial quantities of dust and debris as in mechanical or abrasive removal of lead based paint or chemical removal of lead based paint. This level may generate airborne lead levels in excess of the action level established by Cal/OSHA. Maximum site protection is required to minimize contamination of nearby areas and worker protection is required to protect health.

1) Dustless sanding equipment with HEPA vacuums shall be used.

2) Full personal protection and equipment shall be required in work areas.

3) Standard clean up methods shall be followed in completed area to eliminate any contamination.

4) Standard clean up method shall be followed; put all debris in disposal bags and seal. Contact Maintenance and Operations Area for pickup and disposal.

5) Arrange for the proper disposal of any generated hazardous waste stream through a City approved waste disposal facility.

6) Obtain the EPA hazardous waste Generator Identification number from the City.

7) Provide the City with the generator's copy of the Uniform Hazardous Waste Manifest (UHWM) issued at the time of transportation. Submit to the City UHWM second generator's copy provided by the disposal facility.

H. CLEAN UP OF WORK AREA: One of the most important aspects of lead hazard control or lead hazard abatement is cleanup. Cleanup all visible dust at the end of each work day, as defined in daily cleaning. Execute following final cleanup procedures:

1. For initial cleaning, all areas shall be thoroughly cleaned from the dirtiest area to the cleanest and from top to bottom, using a HEPA vacuum with special attention given to cracks, crevices and corners.

2. Perform second cleaning with a suitable lead dust cleaning solution, again from the dirtiest to the cleanest and from top to bottom, using mops, rags or sponges.

3. When all areas are thoroughly dry, a third cleaning shall be performed using a HEPA vacuum, thoroughly cleaning from the dirtiest to the cleanest areas and from top to bottom until visible dust is not present. Special attention must be given to cracks, crevices and corners.

4. The plastic sheeting may be removed from all surfaces after this cleaning is completed.

5. The cleaning shall be repeated in this fashion on all newly exposed surfaces to ensure that any lead dust that may have escaped the plastic sheeting is cleaned.

6. Each area requires a final visual inspection, by the City or its designee, followed by a wipe clearance. The City or its designee will inform the contractor upon receipt of the analytical results. Clearance levels are shown in the Table below.

7. The space will not be released until the City or its designee has issued a verbal report of the analytical results from the lead dust wipe samples. Sites failing the established clearance guideline shall be cleaned again and re-sampled at the Contractor's expense.

TABLE I: STATE CLEARANCE LEVELS

Surface Areas	Maximum Allowable Level
Interior Floors/Carpets	50 micrograms per square foot
Window Sills	250 ug/ft^2
Window Wells	800 ug/ft^2
Exterior Concrete Floors	800 ug/ft^2
Soil – High Contact Play Area	400 parts per million
Soil Non Play Area	800 ppm

I. WASTE DISPOSAL: The following methods shall be used to minimize the identified waste types:

1. Non-Hazardous Waste: Items utilized during LBP work may be disposed as non-hazardous solid waste after they have been thoroughly HEPA vacuumed or wet wiped. The correct cleaning method is shown in the parenthesis.

   a) Personal protective equipment including disposable coveralls and booties (HEPA vacuum).

   b) Plastic sheeting used on the floor and window coverings (HEPA vacuum and wet wipe).

   c) Plastic sheeting used as exterior barricades (HEPA and wet wipe).

   d) Tools and equipment (wet wipe).

   e) Intact wood structural, functional or decorative members wrapped in 4 mil plastic (wet wipe exterior surface of plastic).

2. Hazardous Waste: The following list includes but is not limited to items disposed of as hazardous waste.

   a) Respirator cartridges.

   b) Damp rags and mop heads used for cleaning.

   c) Paint chips

   d) Decontamination water rinsate

J. CLEARANCE TESTING

1. After the final clean up and waste removal, arrange with the City Inspector for wipe test(s) by the Consultant Project Manager or Inspector. If the site fails to meet the clearance requirement, re-clean in accordance with final cleaning procedure. Contractor shall bear cost of repeated cleaning and sampling until the work passes clearance requirements.

K. LBPs AT RANCHO LOS CERRITOS

Interior, Summary

The following painted interior components were found to contain lead at levels above the action level of 0.7 mg/cm^2 as set by the County of Los Angeles for substances containing lead.

- North Interior

  Paint on the window sashes and window mullions. The paint was observed to be in damaged condition (peeling).

Converse recommends the LBPs be abated prior to any sanding, scraping, or other types of removal activities.

Exterior, Summary

The following painted exterior components were found to contain lead at levels above the action level of 0.7 mg/cm^2 as set by the County of Los Angeles for substances containing lead.

- South Exterior

  Paint on the doors, doorjambs, porch columns, porch ceilings, and porch joists. The paint was observed to be in damaged condition (peeling).

- North Exterior

  Paint on the porch columns, window sashes, doors, doorjambs, and window mullions. The paint was observed to be in damaged condition (peeling).

Converse recommends the LBP's be abated prior to any sanding, scraping, or other types of removal activities.

LINSCOTT LAW & GREENSPAN
ENGINEERS

TRAFFIC IMPACT ANALYSIS AND PARKING DEMAND STUDY RANCHO LOS CERRITOS HISTORIC RANCH MASTER PLAN IMPLEMENTATION

Long Beach, California

Prepared For:

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2-992082-1

April10, 2000
(Original dated February 9, 2000)

APPENDIX C

LINSCOTT LAW & GREENSPAN
ENGINEERS

ENGINEERS & PLANNERS ▪ TRAFFIC, TRANSPORTATION, PARKING

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April 10, 2000

Ms. Ellen Calomiris, Historic Sites Officer
RANCHO LOS CERRITOS HISTORIC SITE
A State and National Historic Landmark
4600 Virginia Road
Long Beach, CA 90807

Subject: **UPDATED TRAFFIC IMPACT STUDY AND PARKING ANALYSIS**
RANCHO LOS CERRITOS HISTORIC RANCH SITE
MASTER PLAN IMPLEMENTATION
Long Beach, California

Dear Ms. Calomiris:

Linscott, Law & Greenspan, Engineers (LLG) is pleased to submit this ***updated*** Traffic Impact Study and Parking Analysis for the Rancho Los Cerritos Historic Ranch Master Plan Implementation. Our study investigates the potential traffic impacts, parking requirements, as well as circulation needs associated with the Rancho as a result of Master Plan Implementation.

The traffic analysis evaluates the relative traffic impacts of the proposed project for a near-term horizon year during the peak commute hours of a "typical" weekday. The two study intersections are located on San Antonio Drive at Virginia Road and at Long Beach Boulevard. This report provides an estimation of the total number of daily vehicular trips that will be generated by Rancho Los Cerritos at completion of the proposed Master Plan. In addition, this study forecast the future peak parking demand for the Rancho for a "typical" weekday and weekend day. A summary of findings and conclusions are described on pages 56 and 57 of this report. We appreciate the opportunity to prepare this study. Should any questions or comments arise regarding the findings and recommendations within this report, please do not hesitate to contact our office at (714) 641-1587.

Very truly yours,
LINSCOTT, LAW & GREENSPAN, ENGINEERS

Richard E. Barretto, P.E.
Senior Transportation Engineer



Philip M. Linscott, P.E. (Ret.)
Jack M. Greenspan, P.E.
William A. Law, P.E. (Ret.)
Paul W. Wilkinson, P.E.
John P. Keating, P.E.
David S. Shender, P.E.

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TRAFFIC IMPACT STUDY AND PARKING ANALYSIS FOR THE RANCHO LOS CERRITOS HISTORIC RANCH MASTER PLAN
Long Beach, California

INTRODUCTION

This Traffic Impact Study and Parking Analysis addresses the potential traffic impacts and parking needs associated with the Rancho Los Cerritos Historic Ranch and the proposed Master Plan Implementation. The "Rancho" is located north of the Virginia Country Club in the City of Long Beach, California.

The traffic analysis focuses on evaluating the potential traffic impacts of the Rancho Los Cerritos Master Plan implementation on the streets and intersections in the immediate vicinity of the site. The traffic analysis includes a forecast of the total number of vehicular trips (passenger vehicles, buses, etc.) that is currently generated by the Rancho.

In addition, a traffic generation forecast has been developed for the proposed Rancho renovation project, based on expected, normal growth and the implementation of the Master Plan. The findings and recommendations of the traffic report satisfy the traffic impact requirements of the City of Long Beach.

The project site has been visited and an inventory of adjacent area roadways and study intersections has been completed. Existing daily traffic counts along Virginia Road have been collected for a one-week period and supplemented with peak period intersection turning movement counts. The peak period traffic counts were conducted in September 1999, during the AM and PM peak hours at two intersections. These traffic volumes were used in preparation of detailed intersection capacity analyses.

This traffic report analyzes existing and future near-term peak hour traffic conditions based upon complete implementation of the Rancho's Master Plan, which was conservatively assumed to occur in the Year 2004 to determine the impacts of the project in the immediate future. Therefore, peak hour traffic forecasts for the 2004 horizon year have been projected by increasing existing traffic volumes by an ambient growth rate of two percent per year. We understand that it could take up to 25 years to implement the Rancho's Master Plan. The two key intersections selected for evaluation provide local access to the site area, include:

1. Long Beach Boulevard at San Antonio Drive
2. Virginia Road at San Antonio Drive

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The volume-to-capacity (V/C) characteristics and Level of Service (LOS) investigations for the AM and PM peak hour at these two key locations were used to evaluate the potential traffic-related impacts associated with anticipated area growth and the proposed Rancho Los Cerritos expansion project.

Included in this Traffic Impact and Parking Analysis are:

- Existing Traffic Counts (peak hour and daily)
- Estimated "Rancho" project traffic generation, distribution, and assignment
- Estimated Daily Traffic volumes on Virginia Road with and without "Rancho" traffic
- AM & PM peak hour capacity analyses for existing conditions and future conditions without and with project traffic
- Parking demand forecast analysis

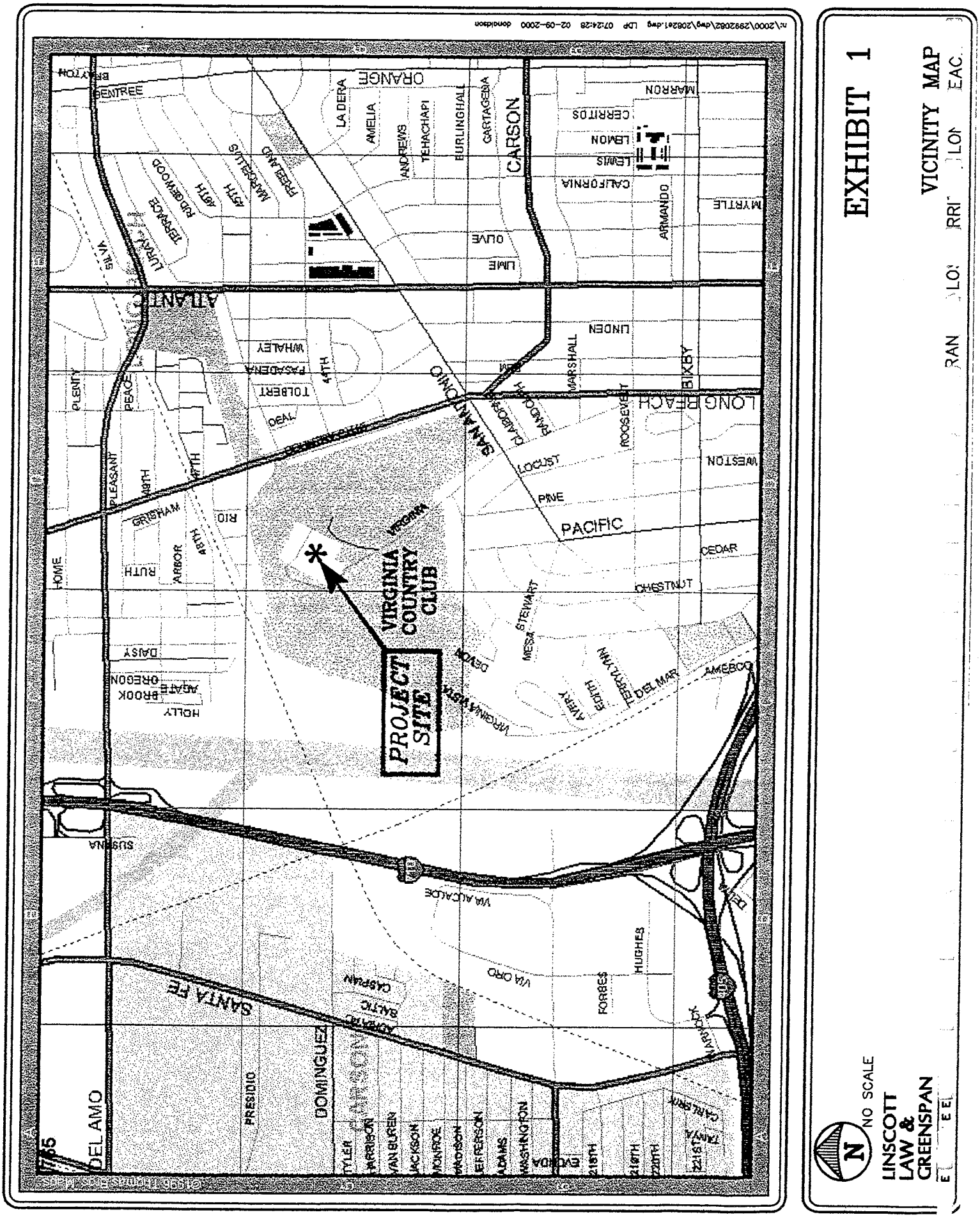
PROJECT DESCRIPTION AND LOCATION

The Rancho Los Cerritos Historic Ranch is a 4.74-acre parcel of land, located in the City of Long Beach. Access to the Ranch is provided via a gated driveway on Virginia Road, north of the Virginia Country Club. **Exhibit 1** presents a Vicinity Map, which illustrates the general location of the project and depicts the surrounding street system.

Rancho Los Cerritos is a National, State, and Local Historic Landmark owned and operated by the City of Long Beach as a public museum and historic site. The site currently offers public tours and garden activities, lectures and workshops, family events, school field trips, an active volunteer program, and a California History Research Library. The existing Ranch House is approximately 10,430 square-feet (SF).

The Rancho Los Cerritos Historic Ranch Master Plan includes the construction of a new Visitor Center with a total usable area of approximately 2,120 SF[1]. The reconstructed 1830's Cota adobe will contain a small orientation area, gift shop, video room, and volunteer office. In addition, a two-story Barns Complex, which includes a basement, will be reconstructed to accommodate 9,200 SF for office use, a meeting room with a capacity of 80 persons, storage for archives, artifact collections, and the research library. A new Caretaker's residence, with approximately 800 SF of floor area, and a 400 SF workshop/gardener's storage area will also be constructed as part of the Master Plan. Please note that the proposed workshop/gardener's storage area will replace the existing storage trailer.

1 The 2,120 SF for the Visitor Center includes the "shed addition" for restrooms; the footprint of usable space in the Visitor Center totals 1,900 SF.


EXHIBIT 1
VICINITY MAP
PROJECT SITE
VIRGINIA COUNTRY CLUB
NO SCALE
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LONG BEACH
CARSON
ORANGE
ATLANTIC
DOMINGUEZ
DELAMO
SANTA FE
PACIFIC
SAN ANTONIO
VIRGINIA
LOCUST
PINE
CEDAR
CHESTNUT
DEL MAR
ANAHEIM
WESTON
MARSHALL
LINDEN
ROOSEVELT
PLEASANT
PEACE
PLENTY
HOME
RUTH
ARBOR
DAISY
HOLLY
GRISHAM
ROSEMEAD
WHALEY
PASADENA
TOLBERT
ORANGETHORPE
ARMANDO
MYRTLE
LEMON
CERRITOS
CALIFORNIA
LEWIS
MARRON
LA DERA
AMELIA
ANDREWS
TEHACHAPI
BURLINGHALL
CARTAGENA
GENTREE
BRAYTON
LIME
OLIVE
MESA
STEWART
DEVON
AVERY
TERRACE
VIA ALCALDE
VIA ORO
HUGHES
FORBES
CASPIAN
SUSANA
PRESIDIO
TYLER
HARRISON
VAN BUREN
JACKSON
MONROE
MADISON
JEFFERSON
ADAMS
WASHINGTON
EVC
218TH
219TH
220TH
221ST
CARLSBAD
605
405

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The Master Plan will be completely implemented in three major phases over a 25-year period. The three phases and respective time of construction are detailed below. A detailed description of the anticipated improvements to be implemented with each phase of the Rancho Los Cerritos Master Plan is attached to the end of the appendices.

- Phase I: 1999-2004
- Phase II: 2005-2014
- Phase III: 2015-2024

In an effort to remain conservative, this analysis assumes that the Rancho will reach its full trip generating potential by the Year 2004. This assumption presents a "worst-case" scenario for future traffic and parking conditions.

The primary purpose of Rancho Los Cerritos is public education. Education programs and tours contrast the past with the present. The current educational programs include public and school tours; self-guided tours; special themed tours; curriculum resources for K-12; and large scale outdoor educational programs and events. Rancho Los Cerritos is open for daily visitors, five days a week, Wednesday through Sunday, from 1:00 PM to 5:00 PM. School tours are currently scheduled in the mornings, from 9:30 AM to 12:00 PM, two (2) days a week (Wednesday and Thursday), with an average of seventy (70) students per school tour, 35 weeks per year (October through June). To increase student school tour attendance, Rancho Los Cerritos proposes to accommodate school tours four (4) days a week, but still maintaining seventy students per morning.

Generally, fourteen (14) public events are scheduled annually on the weekends. The events are usually held on either a Saturday or Sunday, except for concerts. Such events include lectures, workshops, summer concerts, the New Citizens Welcome, etc. Lectures and workshops typically attract 20-50 people, and summer concerts and the New Citizens Welcome attract between 100-250 visitors. Major events, such as Mud Mania or the Christmas Open House, attract between 300-500 persons. During these events, all other activities (i.e. general/group tours) are closed. Currently, five (5) large-scale events are scheduled for the Year 2000, which include the following:

- Restoration Fair: Saturday, May 13, 12:30 PM – 4:30 PM
- Mud Mania: Sunday, August 13, 12:30 PM – 4:30 PM
- Christmas Open House: Sunday, December 3, 1:00 PM –4:00 PM
- Friends, Neighbors and Holiday Fare, Friday & Saturday, December 8 & 9, 6:30 PM – 8:30 PM

Mid-size events attracting between 100 and 250 people per event scheduled for the Year 2000 include the following:

- New Citizens Welcome: June 7, 11:30 AM – 1:30 PM
- Summer Concert Series: Thursday, June 15, July 20, and August 17, 5:00 PM – 7:30 PM
- Antique Appraisal Affaire: Saturday, October 14, 10:00 AM – 2:00 PM

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The use of curbside spaces on Virginia Road for large- and mid-scale, daytime public events is a parking management plan currently utilized by the Rancho to ensure that a sufficient parking supply is provided for all guests. Please note that guests are directed park off-site along Virginia Road, after the on-site parking spaces are full. A description of the current Parking Management Plan utilized by Rancho Los Cerritos can be found attached at the end of the appendices.

Currently, annual attendance at the Rancho averages approximately 16,400 persons, including 4,250 school tour children. **Table 1** provides a summary of the annual attendance at Rancho Los Cerritos during the past four years. Based on information provided by the Rancho, it is our understanding that it is the Rancho's goal to double the total annual visitorship, increasing the existing average annual attendance by 16,400 persons to a maximum of 32,800 persons per year by the completion of the Master Plan. The forecasted attendance not only assumes that will be more attendees at major events, but also year-round use of the assembly room.

On average, 37 visitors tour the Rancho facilities during the four afternoon hours of a "typical" weekday that the rancho is open to the public. On a "typical" weekend day, roughly 56 visitors, on average, tour the site. Further, during a "typical" weekday and weekend day, an average of 10 people and 15 people, respectively, are on-site participating in special classes, meetings or lectures sponsored by the Rancho.

So as not to conflict with the afternoon tours, these classes/lectures are scheduled during weekday/weekend mornings (typically 9:00 AM – 12:00 PM) when the Rancho is closed to the general public. Offsetting these special classes or lectures is another parking management tool used by the Rancho to ensure adequate parking is provided. In essence, the parking supply is "shared" between tour attendees and class participants.

Of the projected 16,400-attendance increase, 1,480 is attributable to the proposed meeting room in the Barns Complex for lectures/workshops and docent training/classes, as well as use of the research library for general meetings and foundation activities. In addition, 3,530 is attributable to weekend public events. The remaining increase in projected annual attendance figures will be the result of normally anticipated growth that is projected to occur even if the Master Plan were not implemented. The 32,800-projected attendance is within reason of the potential maximum site attendance estimated by the Master Plan Site Planning Consultants (6% below the potential maximum site attendance of 35,000 per year).

Exhibit 2A presents a site plan of the Rancho Los Cerritos as it exists today. **Exhibit 2B** presents a conceptual site plan, which illustrates the Rancho Los Cerritos at complete build-out, based on the Master Plan.

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TABLE 1

ANNUAL ATTENDANCE REPORT[2]
Rancho Los Cerritos Historic Site Master Plan
Long Beach, California

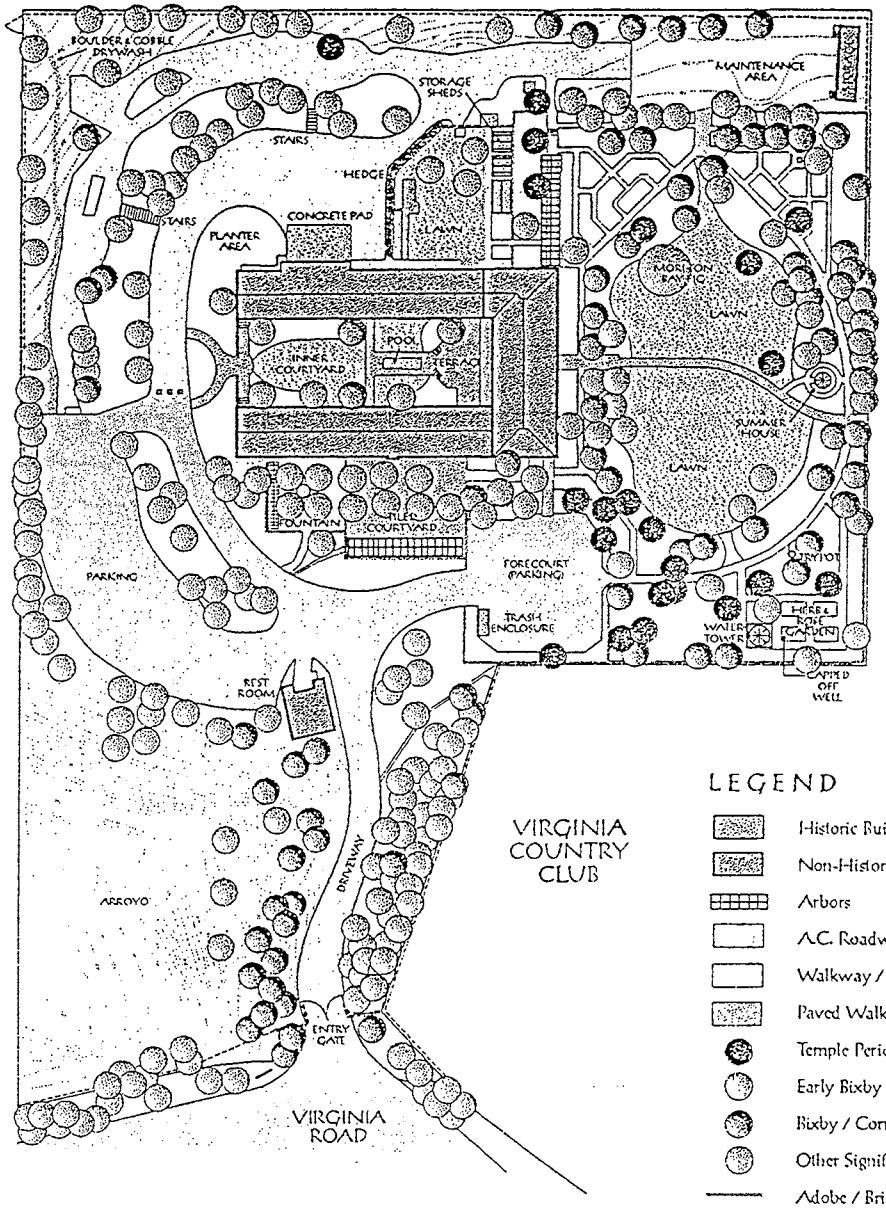
Site Generator/ Attraction	Fiscal Year (FY)					Maximum Attendance at Completion of Master Plan
	FY 1995/1996	FY 1996/1997	FY 1997/1998	FY 1998/1999	Annual Average (4 years)	
General Tours Daily Tours	6,789	7,457	7,156	7,199	7,150	14,300
School Tour	4,531	4,391	4,203	3,868	4,250	8,500
All Public Events	2,677	3,606	3,254	4,563	3,530	7,060
Miscellaneous Site Uses[3]	1,380	1,530	1,440	1,550	1,480	2,960
Total Annual Attendance	15,377	16,984	16,053	17,180	16,400	**32,800**

2 Source: Rancho Los Cerritos Historic Site. Does not include administrative functions.
3 The annual daily attendance at the Rancho Los Cerritos Historic Site due to miscellaneous uses were assumed to be 9% of total annual attendance.

EXISTING RESIDENTIAL

EXIST. RESI-DENTIAL

VIRGINIA COUNTRY CLUB



LEGEND

- Historic Building (Red Tile Roof)
- Non-Historic Building or Structure
- Arbors
- A.C. Roadway
- Walkway / Roadway
- Paved Walkway
- Temple Period Trees (1844-1866)
- Early Bixby Period Trees (1866-1930)
- Bixby / Cornell Period Trees (1930-1954)
- Other Significant Trees (1954-1998)
- Adobe / Brick / Concrete Walls
- Wood Fence
- Chain-Link Fencing
- Contour Line

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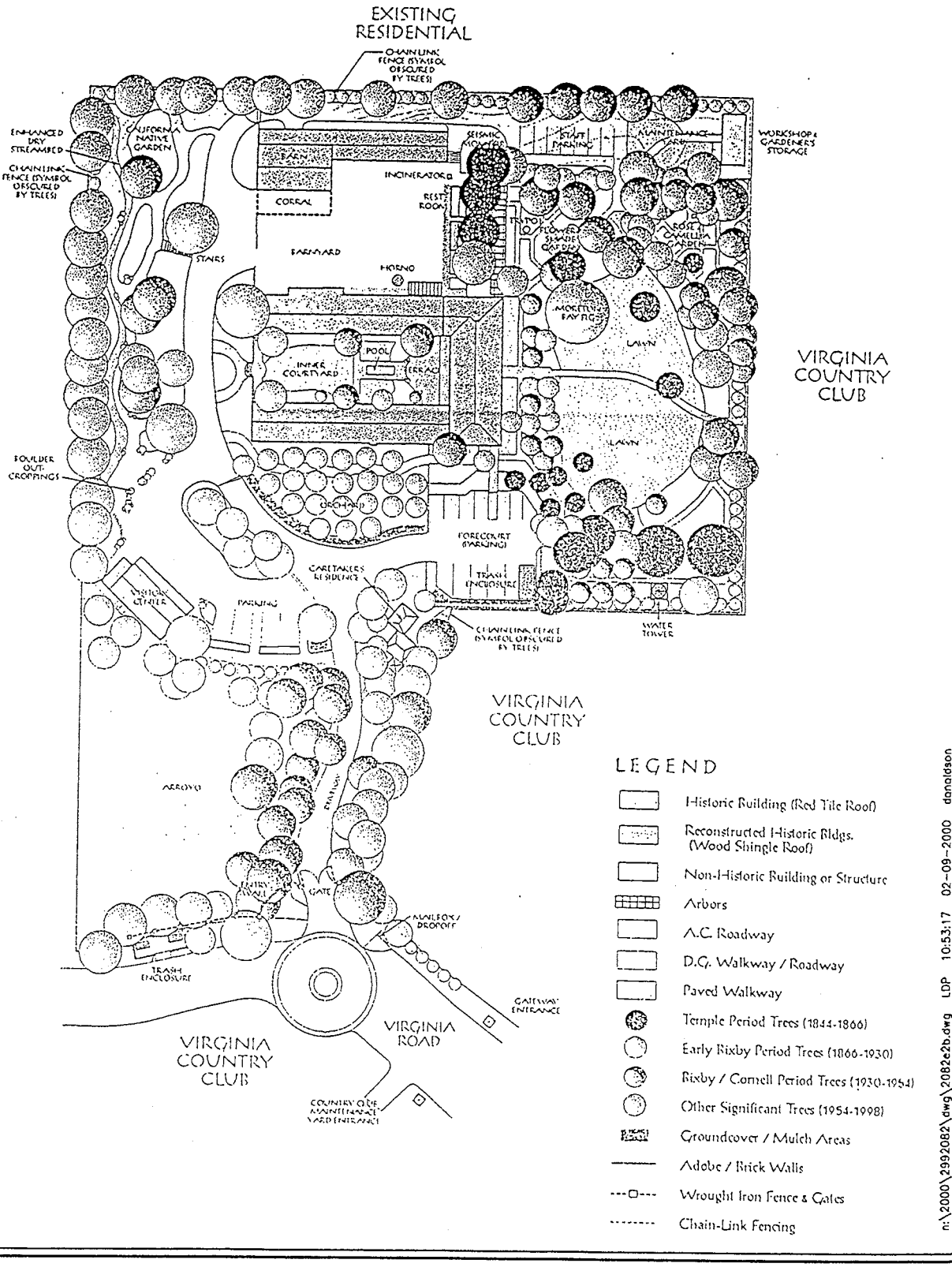
N NO SCALE

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EXHIBIT 2A

EXISTING SITE PLAN

RANCHO LOS CERRITOS, LONG BEACH



N NO SCALE

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EXHIBIT 2B

CONCEPTUAL MASTER PLAN

RANCHO LOS CERRITOS, LONG BEACH

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Employee/Staff Information

Currently, the Rancho employs a full-time staff of 4 persons, 1 part-time custodian, 1 part-time volunteer coordinator and 2 part-time interns. We understand that each employee and part-time staff member drive separately to work. Full-time staff members work between five and six days a week, while part-time employees work three to four days a week.[4] We estimate that an average of four visits to the administration occurs daily. At completion of the Master Plan, an additional 3 full-time employees and 5 part-time staff members are expected to be added.

Volunteer/Docent Information

Based on information provided by the Rancho, eight (8) to twelve (12) docents/volunteers are on-site depending on the day of the week. The docents assist staff with morning school tours and afternoon tours for the general public, as well as the upkeep of the gardens, office administrations, etc. However, review of the docent/volunteer work schedule indicates that they are not at the Rancho at the same time (i.e. garden and curatorial volunteers and school docents usually work in the morning, while General docents and Visitor Center volunteers work in the afternoon.

Parking Supply

Review of the conceptual site plan for the Rancho Los Cerritos Historic Ranch Master Plan indicates that a total of 24 parking spaces will be provided on-site, with 9 designated for employee and/or docent use, 11 spaces designated for general use (visitors, docents, tour attendees), and 4 handicap accessible spaces. Currently, there are 34 parking spaces provided at the Rancho.

In addition, approximately 126 "overflow" curbside parking spaces on Virginia Road are available; 36 north of the Virginia Country Club Driveway and 90 south of the Virginia Country Club Driveway.

We understand that in addition to curbside parking on Virginia Road, the Rancho currently utilizes off-site parking for staff and volunteers during special events. The off-site parking lot is located approximately ¾ of a mile from the Rancho at the intersection of San Antonio Drive and Long Beach Boulevard. For evening events, the Rancho may be able to utilize the parking lot at the Virginia Country Club. School buses, after dropping students off at the Rancho, will park on Virginia Road.

4 Current, daily work schedule of full-time employees: One: 6:30 AM – 3:30 PM, Mon-Thurs; One: 6:30 AM – 12:30 PM, Fri; Three: 9:00 AM – 5:30 PM, Mon-Fri; 12:30 PM – 5:30 PM, Weekends. General docents and Visitor Center volunteers generally work between 1:00 PM and 5:00 PM on weekdays, while school docents work between 9:00 AM and 12:30 PM.

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EXISTING STREET NETWORK

Regional access to the project site is provided by the San Diego (I-405) Freeway, which generally runs in a northwest to southeast direction in the vicinity of the project site. This 8-lane facility, which is located south of the project, is a major highway extending through Los Angeles County and Orange County, and links Long Beach with neighboring communities. Direct access to the site from the I-405 Freeway is provided via the Long Beach Boulevard/I-405 Freeway interchange. Secondary regional access to the site is provided via the I-710 Freeway/Del Amo Boulevard interchange.

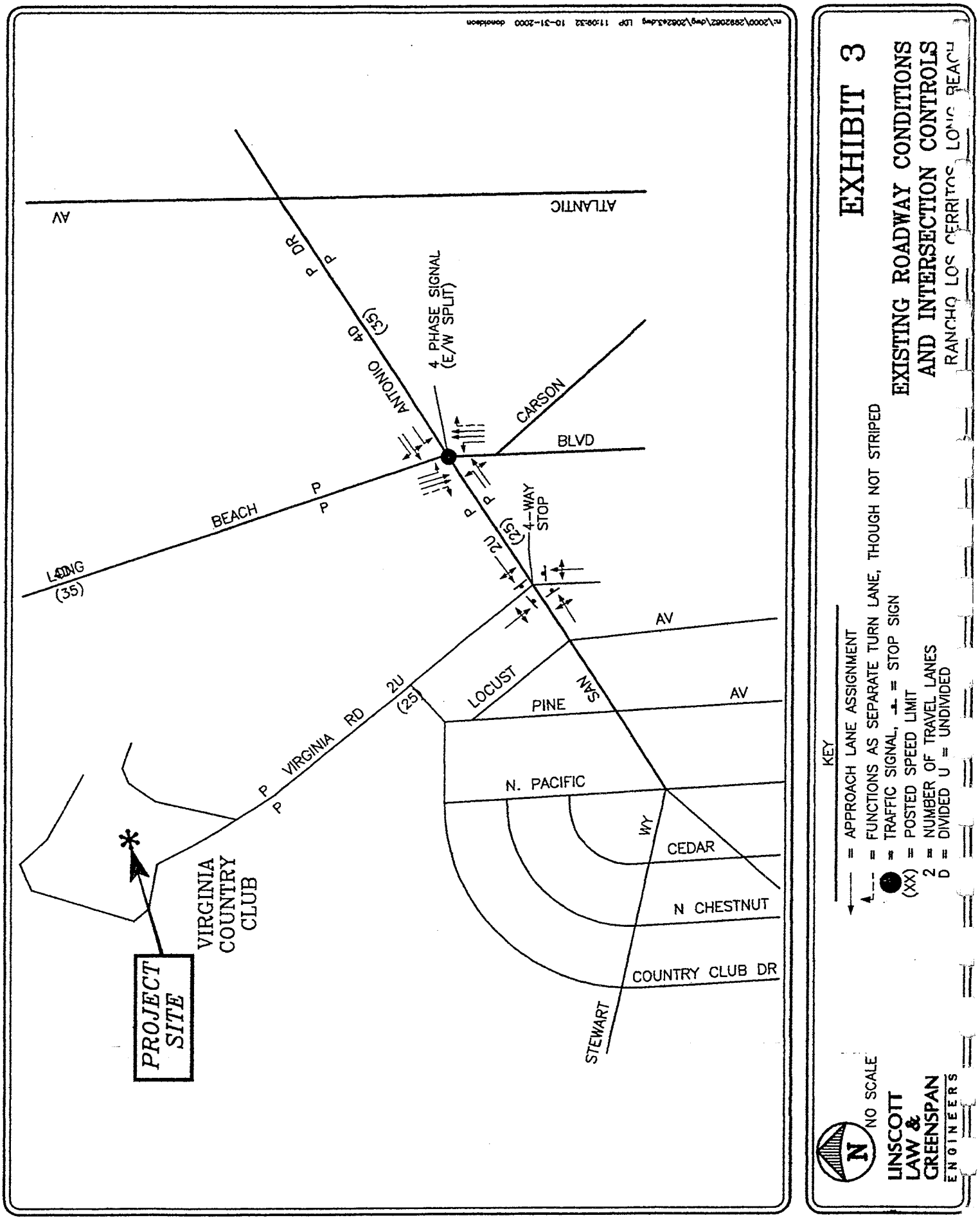
The principal local network of streets serving Rancho Los Cerritos Historic Ranch includes Long Beach Boulevard, San Antonio Drive, and Virginia Road. The following discussion provides a brief synopsis of these key area streets. These descriptions are based on an inventory of existing roadway conditions.

Long Beach Boulevard is a four-lane divided roadway, oriented in the north-south direction. The posted speed limit is 35 miles per hour (mph). On-street parking is permitted on both sides of the street in the study area. A four-phase traffic signal controls the study intersection of Long Beach Boulevard at San Antonio Drive; San Antonio is currently controlled via a split phase, while the southbound left-turn is protective/permissive. The City of Long Beach Circulation Element designates Long Beach Boulevard as a Major Arterial.

San Antonio Drive is an east-west roadway, located south of the project site. East of Long Beach Boulevard, San Antonio Drive provides two travel lanes per direction, divided by a raised median. The speed limit is 35 mph. On-street parking is permitted on both sides of the street. The City of Long Beach Circulation Element designates San Antonio Drive, east of Long Beach Boulevard, as a Minor Arterial. West of Long Beach Drive, San Antonio Drive is a two-lane, undivided roadway with a speed limit of 25 mph. On-street parking is permitted on both sides of the street. The study intersection of San Antonio Drive and Virginia Road is currently All-Way Stop-Controlled.

Virginia Road is a north-south roadway, providing direct access to the Rancho Los Cerritos Historic Ranch, as well as the Virginia Country Club. Virginia Road is a two-lane undivided local collector (one per direction). The speed limit is 25 mph. The majority of Virginia Road, north of San Antonio Drive is undeveloped, with no curb or gutter. However, on-street parking is permitted on both sides of the street. According to recent traffic counts conducted in December 1999, daily traffic on Virginia Road, north of San Antonio Drive, totals approximately 1,503 vehicles per day (vpd) on a weekday (average of Monday through Friday), and roughly 1,345 vpd on a weekend day (average of Saturday and Sunday).

Exhibit 3 presents an inventory of the existing roadway conditions for the arterials and intersections evaluated in this report. The number of travel lanes and intersection controls for the key area intersections are identified.


EXHIBIT 3
EXISTING ROADWAY CONDITIONS
AND INTERSECTION CONTROLS
RANCHO LOS CERRITOS, LONG BEACH
KEY
= APPROACH LANE ASSIGNMENT
= FUNCTIONS AS SEPARATE TURN LANE, THOUGH NOT STRIPED
= TRAFFIC SIGNAL, = STOP SIGN
(XX) = POSTED SPEED LIMIT
2 = NUMBER OF TRAVEL LANES
D = DIVIDED U = UNDIVIDED
NO SCALE
LINSCOTT LAW & GREENSPAN ENGINEERS
PROJECT SITE
VIRGINIA COUNTRY CLUB
VIRGINIA RD
2U
(25)
P
LOCUST
PINE
AV
N. PACIFIC
WY
CEDAR
N CHESTNUT
COUNTRY CLUB DR
STEWART
BEACH
LONG
(35)
ATLANTIC
ANTONIO
4D
(35)
4 PHASE SIGNAL
(E/W SPLIT)
CARSON
BLVD
4-WAY
STOP
(25)
2U

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EXISTING AREA TRAFFIC CONDITIONS

Existing AM and PM peak hour traffic volumes for the study intersections were obtained from traffic counts conducted by Accutek in September 1999. The turning movement counts were conducted on a "typical" weekday from 7:00 AM - 9:00 AM and 4:00 PM - 6:00 PM.

The two key study intersections were designated for evaluation since the majority of "Rancho" traffic utilize these intersections to access the site. **Exhibits 4** and **5** present the AM and PM peak hour traffic volumes at the two study intersections, respectively. Detailed 24-hour traffic count data and manual turning movement count sheets may be found in **Appendix A**.

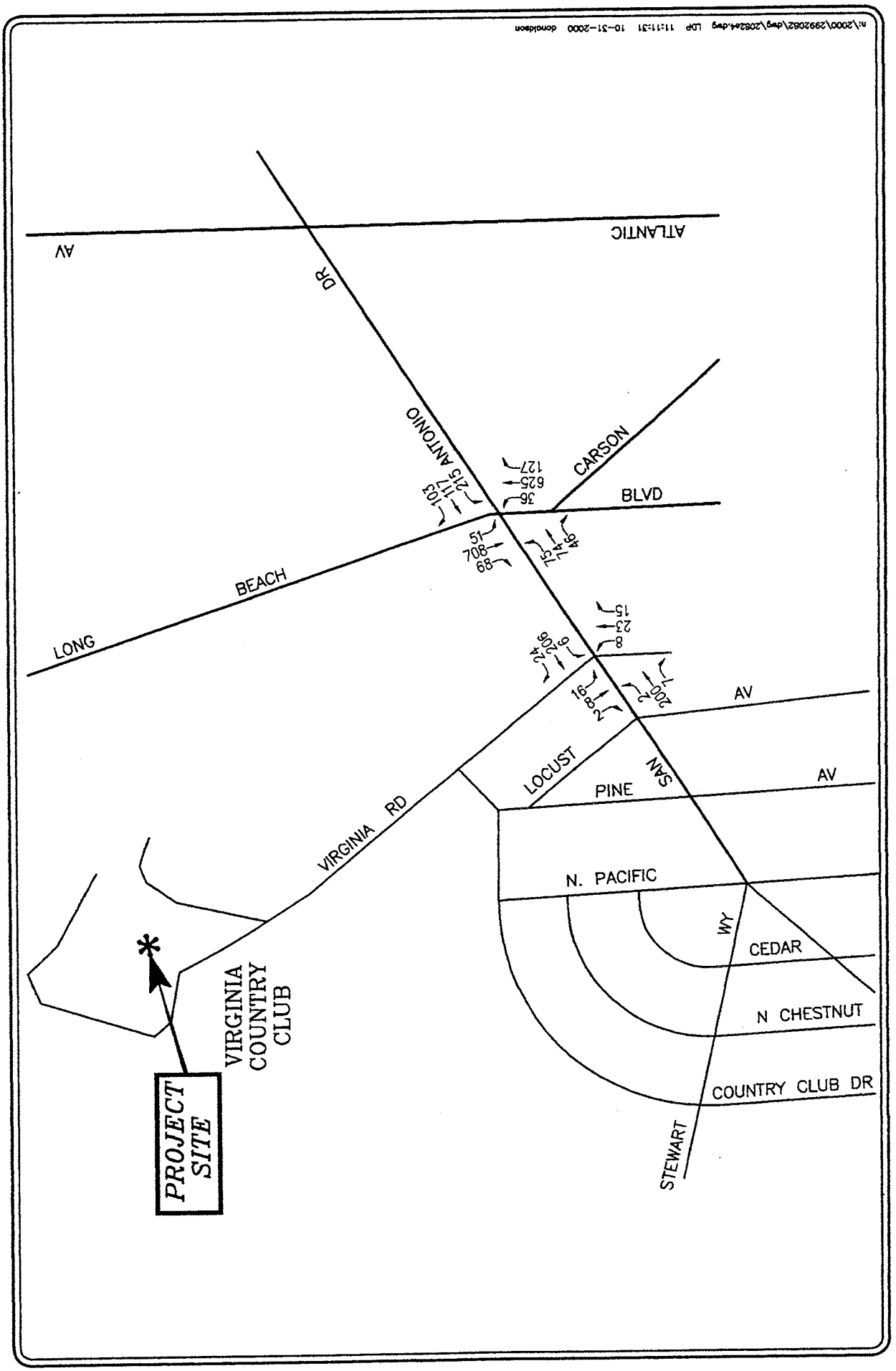
Table 2 summarizes the daily traffic volumes collected on Virginia Road, between San Antonio Drive and the Rancho Los Cerritos gated entry. A comparison of the data shows that on a daily basis, traffic volumes on Virginia Road are greater during a weekday than on a weekend day. Review of this table, shows that daily traffic on Virginia Road, north of the Virginia Country Club driveway, averages approximately 983 vehicles per weekend day, and 1,047 vehicles per weekday. North of San Antonio Drive, daily traffic on Virginia Road averages approximately 1,345 vehicles per "weekend" day, and 1,503 vehicles per weekday.

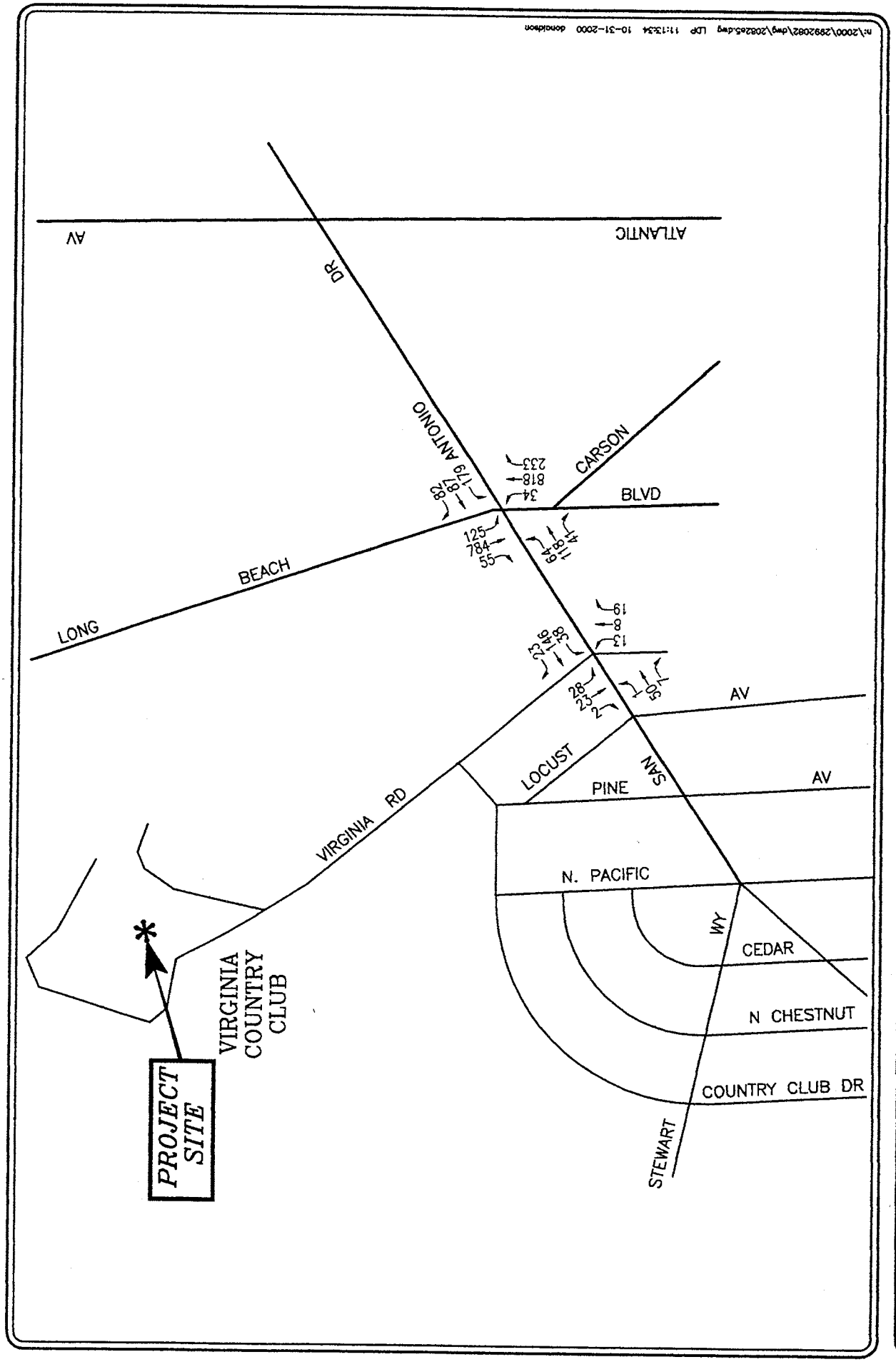
The difference in traffic volumes on Virginia Road, observed north of San Antonio Drive and north of the Country Club Drive, is due the drop-off into the residential neighborhoods fronting Virginia Road and those accessed via County Club Drive.

The Rancho currently generates, on average, 86 daily trips on a weekend day and 89 daily trips on a weekday. It should be noted that the daily traffic volumes collected on Monday and Tuesday, at the existing Rancho driveway are representative of the site's trip generation potential without the influence of "tour" traffic (daily visitor access is restricted to Wednesday through Sunday, from 1:00 PM to 5:00 PM).

Similarly, daily traffic volumes collected on Monday, Tuesday, and Friday at the Rancho driveway do not include school tour traffic, as school tours are scheduled exclusively on Wednesday's and Thursday's. Therefore, traffic volumes earlier in the week are generated by the existing administrative facilities and volunteer/support functions related to the day-to-day operations of the Rancho.

Accutek collected the daily traffic volumes on Virginia Road and the Rancho's Driveway in December 1999. Please note that in weeks prior to Christmas, the Rancho traditionally experiences fewer visitors, which may be reflected in the daily traffic counts.


EXHIBIT 4
EXISTING AM PEAK HOUR TRAFFIC VOLUMES
ATLANTIC
AV
DR
ANTONIO
CARSON
BLVD
LONG
BEACH
AV
LOCUST
PINE
AV
VIRGINIA RD
N. PACIFIC
WY
CEDAR
N CHESTNUT
COUNTRY CLUB DR
STEWART
VIRGINIA COUNTRY CLUB
PROJECT SITE
NO SCALE
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EXHIBIT 5
EXISTING PM PEAK HOUR TRAFFIC VOLUMES
RANCHO LOS CERRITOS, LONG BEACH
ATLANTIC
AV
DR
ANTONIO
CARSON
BLVD
LONG
BEACH
AV
LOCUST
PINE
AV
SAN
VIRGINIA RD
N. PACIFIC
WY
CEDAR
N CHESTNUT
COUNTRY CLUB DR
STEWART
VIRGINIA COUNTRY CLUB
PROJECT SITE
NO SCALE
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TABLE 2

DAILY TRAFFIC VOLUME SUMMARY[5]
Ranch Los Cerritos Historic Site Master Plan
Long Beach, California

Day of Week	Rancho Driveway, north of Virginia Road	Virginia Road, north of Country Club Drive	Virginia Road, north of San Antonio Road	Average Daily Traffic Volumes
Weekend				
Saturday, December 18, 1999	82	996	1,452	843
Sunday, December 19, 1999	90	970	1,238	766
Average Weekend Volume	**86**	**983**	**1,345**	**805**
Weekday				
Monday, December 20, 1999	57	960	1,372	796
Tuesday, December 14, 1999	29	857	1,293	726
Wednesday, December 15, 1999	70	1,159	1,597	942
Thursday, December 16, 1999	208[6]	1,220	1,660	1,029
Friday, December 17, 1999	82	1,038	1,595	905
Average Weekday Volume	**89**	**1,047**	**1,503**	**880**

5 Source: Traffic counts conducted by Accutek in December 1999. Please note that the traffic counts may represent fewer visitors than normal due to the Christmas season.

6 Please note that a Holiday Open House event took place on Thursday, December 16, 1999, which accounts for the high visitor count.

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EXISTING INTERSECTION CONDITIONS

ICU Method of Analysis

In conformance with the City of Long Beach and Los Angeles County Congestion Management Program (CMP) requirements, existing AM and PM peak hour operating conditions for key signalized intersection of Long Beach Boulevard at San Antonio Drive was evaluated using the Intersection Capacity Utilization (ICU) methodology. The ICU technique reflects the flow characteristics of an intersection and estimates the volume to capacity (V/C) relationship for an intersection based on the individual V/C ratios for key conflicting traffic movements. The ICU numerical value represents the percent signal (green) time, and thus capacity, required by existing and/or future traffic. The ICU methodology assumes uniform traffic distribution per intersection approach lane and optimal signal timing. However, as directed by City staff, the ICU/LOS calculations were adjusted to account for the intersection's existing signal phasing (4ϕ).

The ICU value is the sum of the critical volume to capacity ratios at an intersection; it is not intended to be indicative of the LOS of each of the individual turning movements. The value translates to a Level of Service (LOS) estimate, which is a relative measure of the intersection performance. **Table 3** presents the six qualitative categories of Level of Service and corresponding ICU value range. According to City of Long Beach criteria, LOS D is the minimum acceptable condition that should be maintained during the peak commute hours, or the current LOS if the existing LOS is worse than LOS D (i.e. LOS E or F).

Per LA County CMP requirements, the ICU calculations utilize a lane capacity of 1,600 vehicle per hour (vph) for left-turn, through, and right-turn lanes, and dual left turn capacity of 2,880 vph. Per City of Long Beach requirements, a clearance adjustment factor, which varies between 0.100 and 0.180, was added to each Level of Service calculation. The clearance and lost time factor are dependent on the following:

# of Critical Phases	LT Phasing Type	Clearance and Loss Time Factor
2	N/A	0.10
3	P/PLT	0.12
3	P	0.15
4	P/PLT	0.14
4	P	0.18

The ICU method of analysis and LOS concept are described in further detail in **Appendix B.** Appendix B also presents the ICU/LOS calculations at each of the key intersections for the AM and PM peak hour.

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TABLE 3

LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS[7]
Ranch Los Cerritos Historic Ranch Master Plan
Long Beach, California

Level of Service (LOS)	Intersection Capacity Utilization Value (V/C)	Level of Service Description
A	0.00 - 0.60	Free Flow; Very low delay, less than 5.0 seconds per vehicle.
B	0.61 - 0.70	Rural Design; Delay in the range of 5.1 to 15 seconds per vehicle.
C	0.71 - 0.80	Urban Design; Delay in the range of 15.1 to 25 seconds per vehicle.
D	0.81 - 0.90	Maximum Urban Design; Delay ranges from 25.1 to 40 seconds per vehicle.
E	0.91 - 1.00	Capacity; Delay ranges from 40.1 to 60 seconds per vehicle.
F	≥ 1.01	Forced Flow; Delay in excess of 60 seconds per vehicles.

7 See Appendix B for detailed description of ICU method of analysis and LOS concept.

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HCM Method of Analysis

In addition to the ICU method of analysis, the Highway Capacity Manual (HCM) unsignalized methodology was utilized for the capacity and level of service analysis at the All-Way Stop Controlled (AWSC) study intersection of Virginia Road at San Antonio Drive. This methodology estimates the average total delay for each of the subject movements and determines the level of service for each approach. The overall average delay, measured in seconds per vehicle, and level of service is then calculated for the entire intersection.

The HCM delay value translates to a Level of Service (LOS) estimate, which is a relative measure of the intersection's performance. The six qualitative categories of Level of Service that have been defined along with the corresponding HCM delay value range, are shown in **Table 4**.

Existing Level of Service Results

Table 5 summarizes the existing peak hour service level calculations for the two study intersections based on existing traffic volumes and current street geometry. Review of Table 5 indicates that the two study intersections currently operate at LOS C or better during the AM and PM peak hours.

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TABLE 4

LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS
Ranch Los Cerritos Historic Site Master Plan
Long Beach, California

Level of Service (LOS)	Highway Capacity Manual Delay Value (sec/veh)	Level of Service Description
A	≤ 5.0	Little or no delay
B	> 5.0 and ≤ 10.0	Short traffic delays
C	> 10.0 and ≤ 20.0	Average traffic delays
D	> 20.0 and ≤ 30.0	Long traffic delays
E	> 30.0 and ≤ 45.0	Very long traffic delays
F	≥ 45.0	Severe congestion

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TABLE 5

1999 EXISTING PEAK HOUR LEVELS OF SERVICE[8]
Ranch Los Cerritos Historic Site Master Plan
Long Beach, California

Key Intersection	Time Period	Control Type	ICU or HCM	LOS
1) Long Beach Boulevard @ San Antonio Drive[9]	AM	4ϕ Traffic	0.586	A
	PM	Signal	0.728	C
2) Virginia Road @ San Antonio Drive	AM	All-Way	3.6 sec/veh	A
	PM	Stop	2.6 sec/veh	A

8 Appendix B contains ICU/LOS and HCM/LOS calculation sheets for the key study intersections.
9 The existing traffic signal operates as a split phase in the east/west direction (San Antonio Drive) and a protective/permissive southbound left-turn phase.

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TRAFFIC FORECASTING METHODOLOGY

In order to estimate the traffic impact characteristics of associated with an increase in annual attendance due to implementation of the Rancho's Master Plan, a multi-step process has been utilized.

As stated earlier, total annual visitorship at the Rancho is projected to increase by 16,400 persons to an estimated total of 32,800 persons per year by the year 2004. Of the projected 16,400-attendance increase, 1,480 is attributable to miscellaneous uses (meeting space, library use, etc.) and 3,530 is attributable to weekend public events. The remaining 11,400-person increase in projected annual attendance figures will be the result of normally anticipated growth that would occur even if the Master Plan were not implemented.

The first step is traffic generation, which estimates the total potential arriving and departing traffic on a peak hour and daily basis. The traffic generation potential is forecast by applying the appropriate vehicle trip generation equations or rates to the project development tabulation.

The second step of the forecasting process is traffic distribution, which identifies the origins and destinations of inbound and outbound project traffic. These origins and destinations are typically based on demographics and existing/expected future travel patterns in the study area.

The third step is traffic assignment, which involves the allocation of project traffic to study area streets and intersections. Traffic assignment is typically based on minimization of travel time, which may or may not involve the shortest route, depending on prevailing operating conditions and travel speeds. Traffic distribution patterns are indicated by general percentage orientation, while traffic assignment allocates specific volume forecasts to individual roadway links and intersection turning movements throughout the study area.

With the forecasting process complete and project traffic assignments developed, the impact of the project is isolated by comparing operational (LOS) conditions at selected key intersections using expected future traffic volumes with and without forecast project traffic. The need for site-specific and/or cumulative local area traffic improvements can then be evaluated.

PROJECT TRAFFIC CHARACTERISTICS

Project Traffic Generation

Traffic generation is expressed in vehicle trip ends, defined as one-way vehicular movements, either entering or exiting the generating land use. Generation factors and equations used in the traffic forecasting procedure are typically found in the Sixth Edition of *Trip Generation,* published

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by the Institute of Transportation Engineers (ITE) [Washington, D.C., 1997] and *San Diego Traffic Generators*, dated December 1996, published by San Diego Associated Governments (SANDAG).

However, the traffic generation characteristics of a historic ranch are not accurately documented in either of the above referenced manuals. Given the uniqueness of this land use type, the trip generation potential of the Rancho, after implementation of the Master Plan, was estimated based on existing and projected annual attendance figures, and the Rancho's operating schedule. The monthly visitation patterns of the existing Rancho facilities were reviewed to develop peak weekday trip patterns. The peak month attendance levels were used to develop person-trip estimates, and consequently, vehicle trip estimates. **Appendix C** contains the results of the trip generation calculations for the proposed Rancho Los Cerritos Historic Ranch.

Table 6 summarizes the trip generation potential for the Rancho Los Cerritos Historic Ranch, with the implementation of the Master Plan.

As shown, the number of trips generated by the Rancho will increase from a current level of 184 daily trips (92 inbound, 92 outbound) to 278 daily trips (139 inbound, 139 outbound) after complete implementation of the Master Plan. Of the projected 278 daily trips, only 31 trips are a direct result of miscellaneous uses. The remaining increase of 63 daily trips is a factor of normal growth that will result with or without the Rancho renovation/expansion.

The Rancho is expected to generate a total of 7 trips (6 inbound, 1 outbound) during the AM peak hour and 42 trips (6 inbound, 36 outbound) in the PM peak hour of a "typical" weekday. Of these trips, normal growth in the Rancho's visitorship is expected to result in 4 additional trips in the AM peak hour and 19 trips in the PM peak hour. The Rancho renovation/expansion is expected to generate a nominal amount of traffic during the AM and PM peak hours.

Project Traffic Distribution and Assignment

Project traffic volumes entering and exiting the project site have been distributed and assigned to the adjacent street system based upon the following considerations: 1) the site's proximity to major traffic carriers; 2) expected localized traffic flow patterns based on adjacent street channelization and presence of traffic signals; and 3) existing peak hour intersection turning movement volumes.

The general directional traffic distribution pattern for the Rancho is presented in **Exhibit 6**. **Exhibits 7** and **8** display the traffic volumes generated by the existing Rancho Los Cerritos Historic Ranch at adjacent intersections and site driveways during the AM and PM peak hour, respectively. **Exhibits 9** and **10** present the added traffic volume forecast as a result of normal growth, and increase in the attendance and renovation/expansion of the Rancho.

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TABLE 6

PROJECT TRAFFIC GENERATION FORECAST
Ranch Los Cerritos Historic Site Master Plan
Long Beach, California

Project Description	Daily (2-Way)	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Generation Forecast:							
Existing Site Generate Traffic							
• Existing Administrative/ Volunteer Functions (No Tours/Events) [10]	90	2	1	3	4	4	8
• Existing Rancho Los Cerritos Historic Site[11]	94	0	0	0	1	14	15
Subtotal – Existing Site Traffic:	**184**	**2**	**1**	**3**	**5**	**18**	**23**
New Site Generated Traffic[12]							
• Rancho Los Cerritos *Growth*[13]	63	4	0	4	1	18	19
• Rancho Los Cerritos *Expansion*[14]	*31*	*0*	*0*	*0*	*0*	*0*	*0*
Subtotal – New Site Traffic:	**94**	**4**	**0**	**4**	**1**	**18**	**19**
Total Rancho Los Cerritos Trip Generation Potential:	**278**	**6**	**1**	**7**	**6**	**36**	**42**

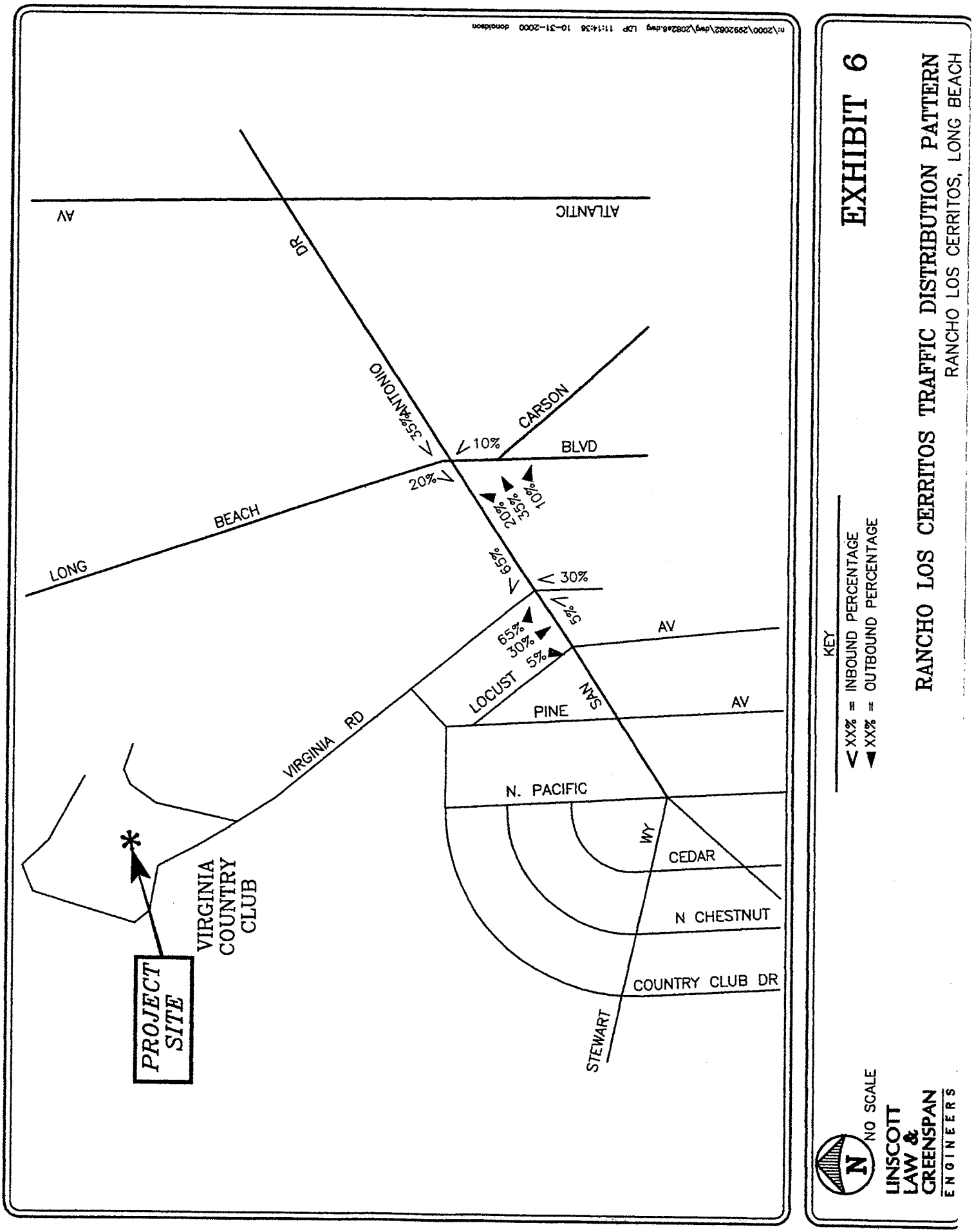
10 Existing average daily and peak hour trip generation for the existing Administrative/Volunteer functions at the Rancho, exclusive of "attendance trips" due to the Historic Ranch, is based on driveway counts conducted during the week of December 14, 1999 to December 20, 1999 (Refer to Appendix A). Existing traffic represents the average of the five-day weekday count. The majority of these volumes represent trips made to and from the Rancho by Staff/Employees and Volunteers, and are considered "repeat" trips, not "new" trips generated by Visitors to the site.

11 Refer to Appendix C-1, C-2, and C-3 for detailed trip generation calculations for the Rancho Los Cerritos Historic Site.

12 Refer to Appendix C-4, C-5, and C-6 for detailed trip generation calculations for the Rancho Los Cerritos Historic Site.

13 Rancho Los Cerritos *Growth* refers to the increase of attendance for general tours and school tours. 4 AM Peak Hour inbound trips and 4 outbound PM peak hour trips represent the increase of project trips due to the projected number of full-time and part-time employees.

14 Rancho Los Cerritos *Expansion* refers to the increase of attendance due to miscellaneous uses (i.e. meeting room).


EXHIBIT 6
RANCHO LOS CERRITOS TRAFFIC DISTRIBUTION PATTERN
RANCHO LOS CERRITOS, LONG BEACH
KEY
< XX% = INBOUND PERCENTAGE
▼ XX% = OUTBOUND PERCENTAGE
NO SCALE
LINSCOTT LAW & GREENSPAN ENGINEERS
PROJECT SITE
VIRGINIA COUNTRY CLUB
VIRGINIA RD
LONG BEACH BLVD
ATLANTIC AV
SAN ANTONIO DR
CARSON
LOCUST
PINE
AV
N. PACIFIC
WY
CEDAR
N CHESTNUT
COUNTRY CLUB DR
STEWART
10%
20%
35%
65%
30%
5%

n:\2000\2892082\dwg\2082a7.dwg LDP 11:15:47 10-31-2000 donaldson
EXHIBIT 7
EXISTING AM PEAK HOUR "RANCHO" TRAFFIC VOLUMES
RANCHO LOS JERRITOS, LONG BEACH
ATLANTIC
AV
DR
ANTONIO
CARSON
BLVD
BEACH
LONG
AV
LOCUST
PINE
SAN
AV
VIRGINIA RD
N. PACIFIC
WY
CEDAR
N CHESTNUT
COUNTRY CLUB DR
STEWART
VIRGINIA COUNTRY CLUB
PROJECT SITE
NO SCALE
LINSCOTT LAW & GREENSPAN

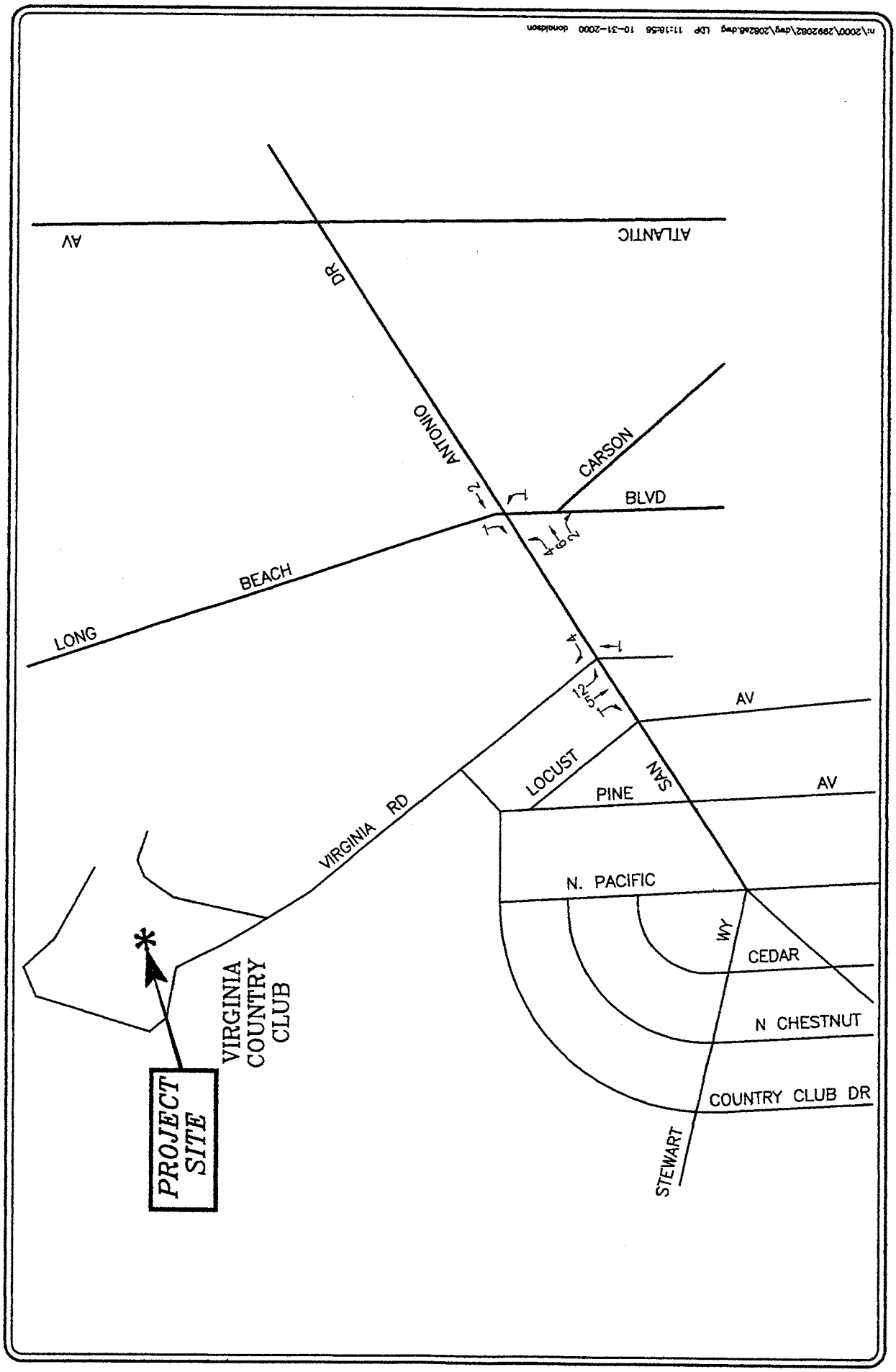


EXHIBIT 8

EXISTING PM PEAK HOUR "RANCHO" TRAFFIC VOLUMES
RANCHO LOS CERRITOS, LONG BEACH

NO SCALE

LINSCOTT LAW & GREENSPAN ENGINEERS

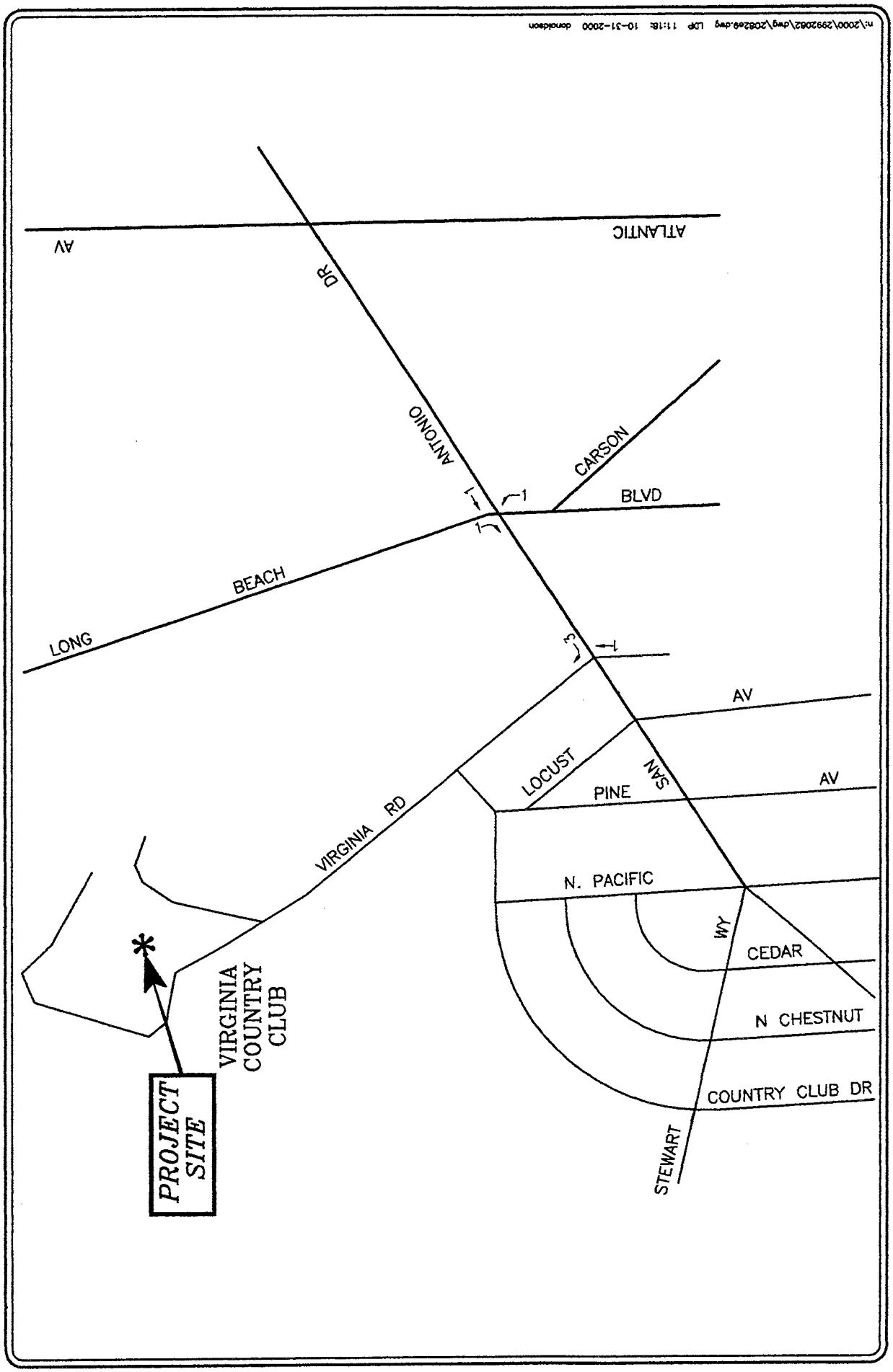
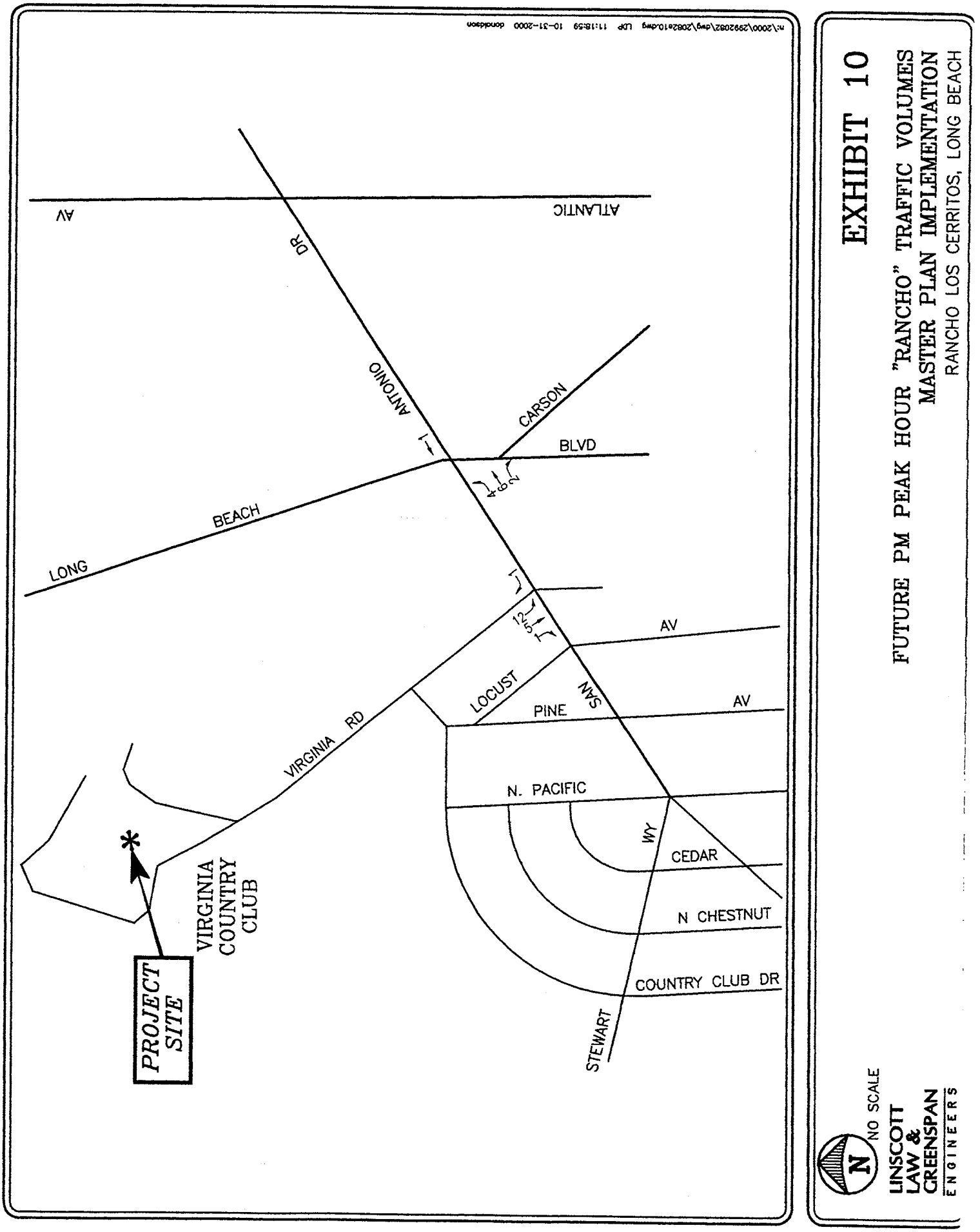


EXHIBIT 9

FUTURE AM PEAK HOUR "RANCHO" TRAFFIC VOLUMES
MASTER PLAN IMPLEMENTATION

NO SCALE

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EXHIBIT 10
FUTURE PM PEAK HOUR "RANCHO" TRAFFIC VOLUMES
MASTER PLAN IMPLEMENTATION
RANCHO LOS CERRITOS, LONG BEACH
ATLANTIC
AV
DR
ANTONIO
CARSON
BLVD
LONG
BEACH
AV
LOCUST
PINE
AV
SAN
VIRGINIA RD
N. PACIFIC
WY
CEDAR
N CHESTNUT
COUNTRY CLUB DR
STEWART
VIRGINIA COUNTRY CLUB
PROJECT SITE
NO SCALE
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FUTURE TRAFFIC CONDITIONS

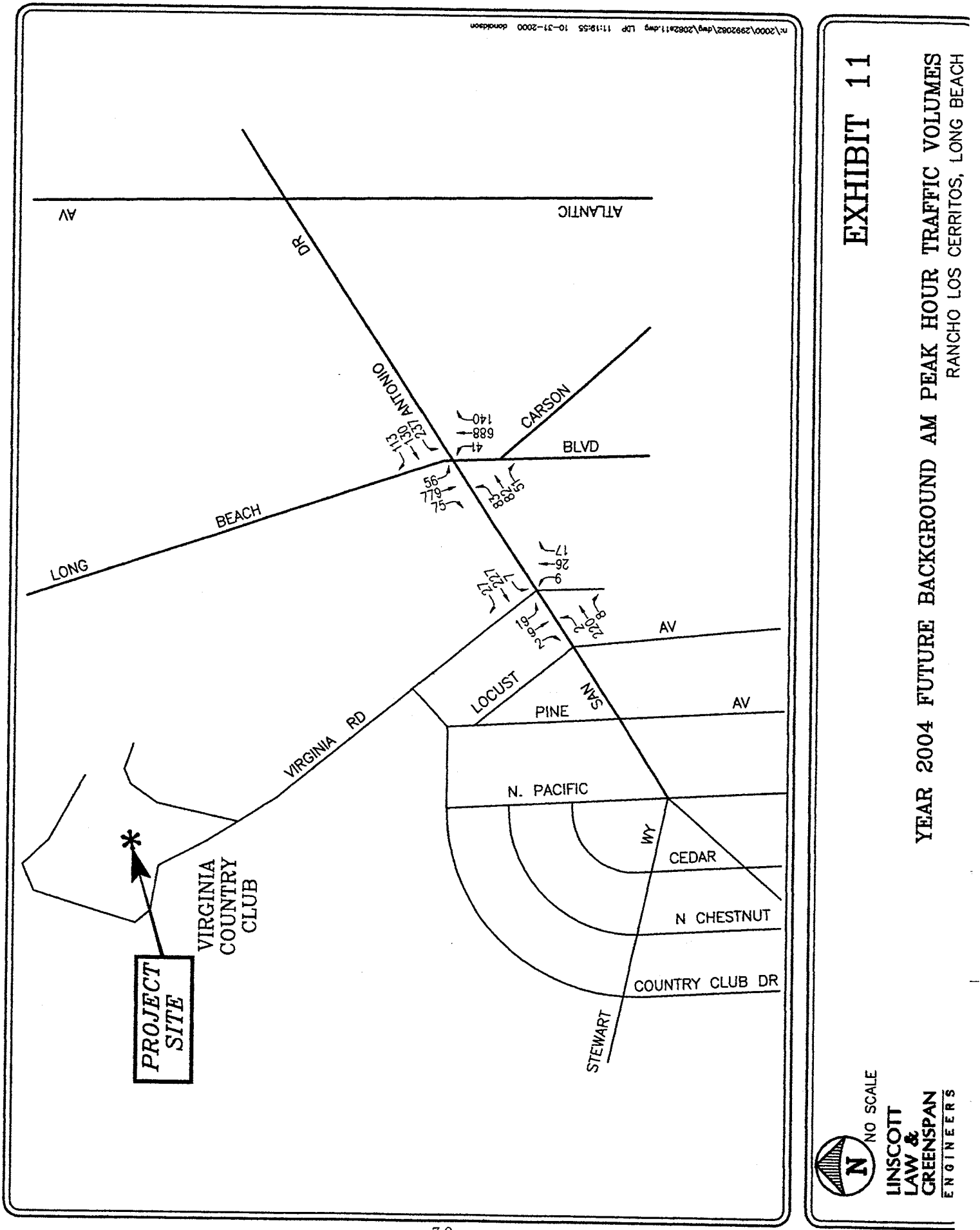
Ambient Traffic Growth

Horizon year background traffic growth estimates have been calculated using an ambient growth factor. For this analysis, a two percent annual growth rate was used to develop background traffic conditions. Thus, to develop background traffic projections for the Year 2004 (in the absence of the proposed project), a 10.0% growth rate was applied to existing 1999 traffic volumes at the key study intersections. This ambient growth factor is intended to account for unknown and future related projects in the greater study area, as well as account for regular growth in traffic volumes due to development of projects outside the study area.

Year 2004 Traffic Volumes

Exhibits 11 and **12** present future AM and PM peak hour background traffic volumes at the two key study intersections for the Year 2004. The background traffic volumes include the traffic generated by the Rancho's administrative functions (included in existing traffic) and daily visitations to the existing Rancho facilities (these volumes were presented in Exhibits 7 and 8).

Exhibits 13 and **14** illustrate forecast AM and PM peak hour traffic volumes with the inclusion of future traffic generated by the Rancho.


EXHIBIT 11
YEAR 2004 FUTURE BACKGROUND AM PEAK HOUR TRAFFIC VOLUMES
RANCHO LOS CERRITOS, LONG BEACH
ATLANTIC
AV
DR
ANTONIO
CARSON
BLVD
LONG
BEACH
AV
LOCUST
PINE
AV
SAN
VIRGINIA RD
N. PACIFIC
WY
CEDAR
N CHESTNUT
COUNTRY CLUB DR
STEWART
VIRGINIA COUNTRY CLUB
PROJECT SITE
NO SCALE
LINSCOTT LAW & GREENSPAN ENGINEERS

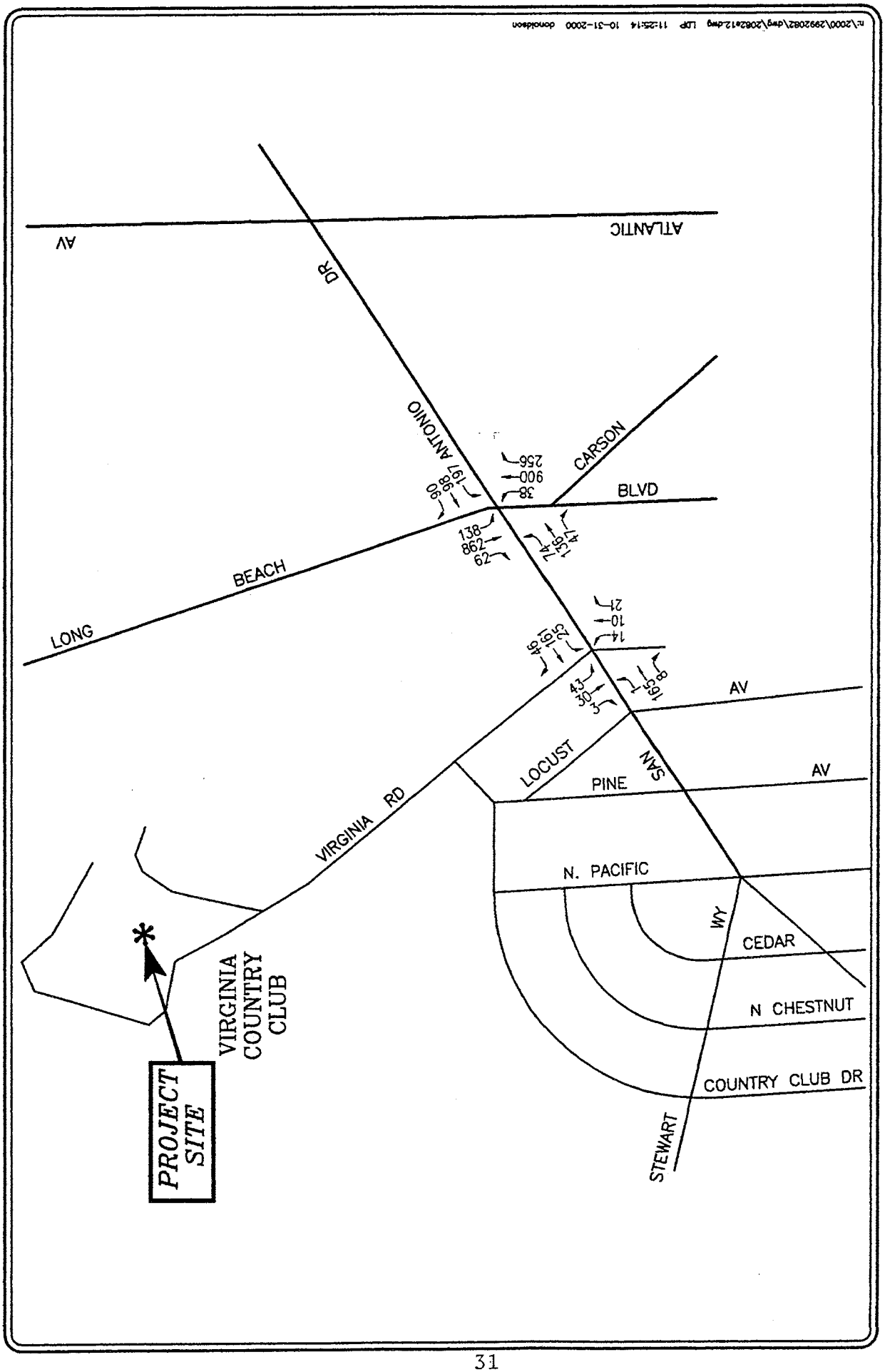


EXHIBIT 12

YEAR 2004 FUTURE BACKGROUND PM PEAK HOUR TRAFFIC VOLUMES

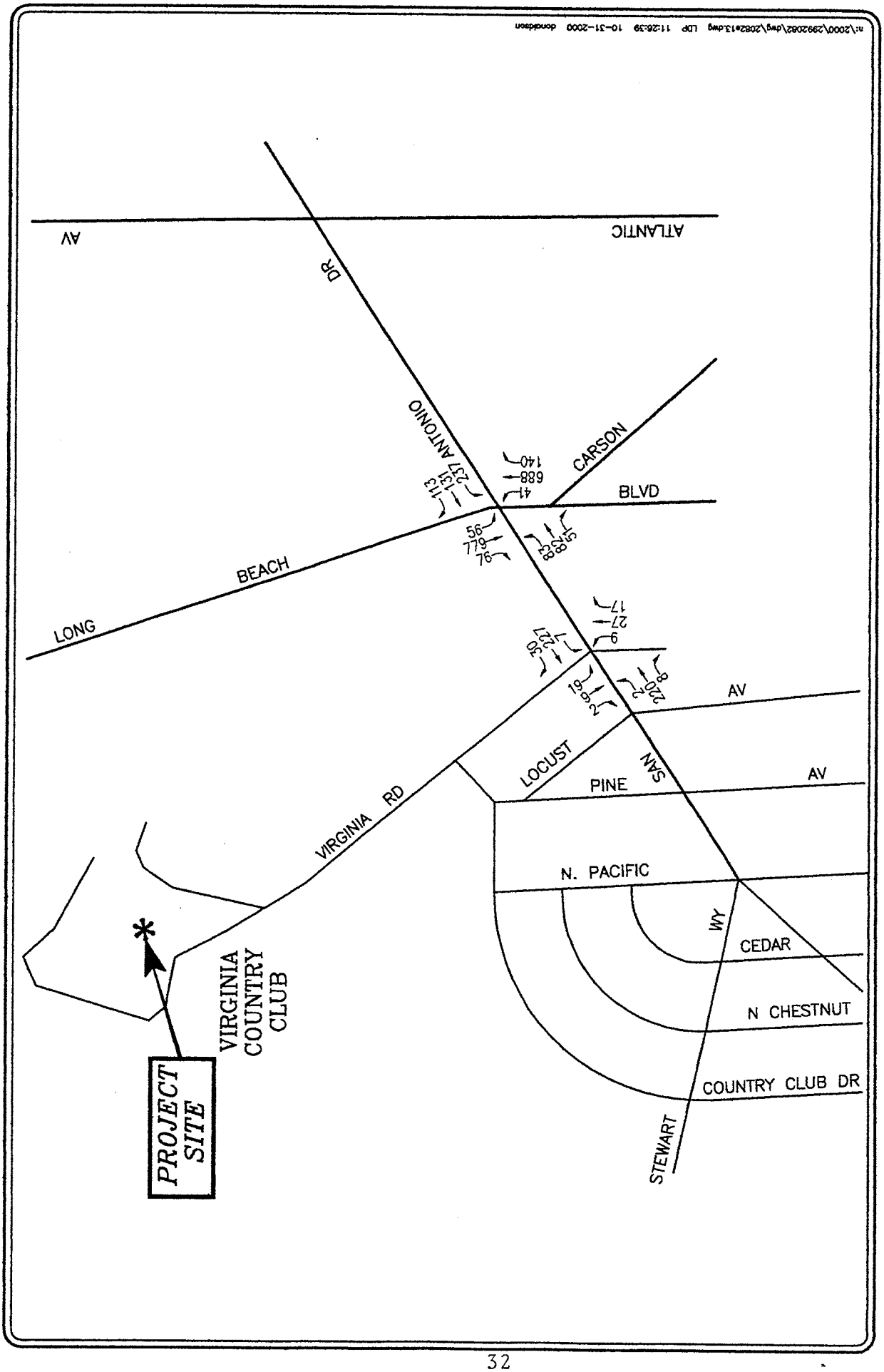


EXHIBIT 13

YEAR 2004 FUTURE BACKGROUND AM PEAK HOUR TRAFFIC VOLUMES WITH "RANCHO" PROJECT TRAFFIC

RANCHO LOS CERRITOS, LONG BEACH

NO SCALE

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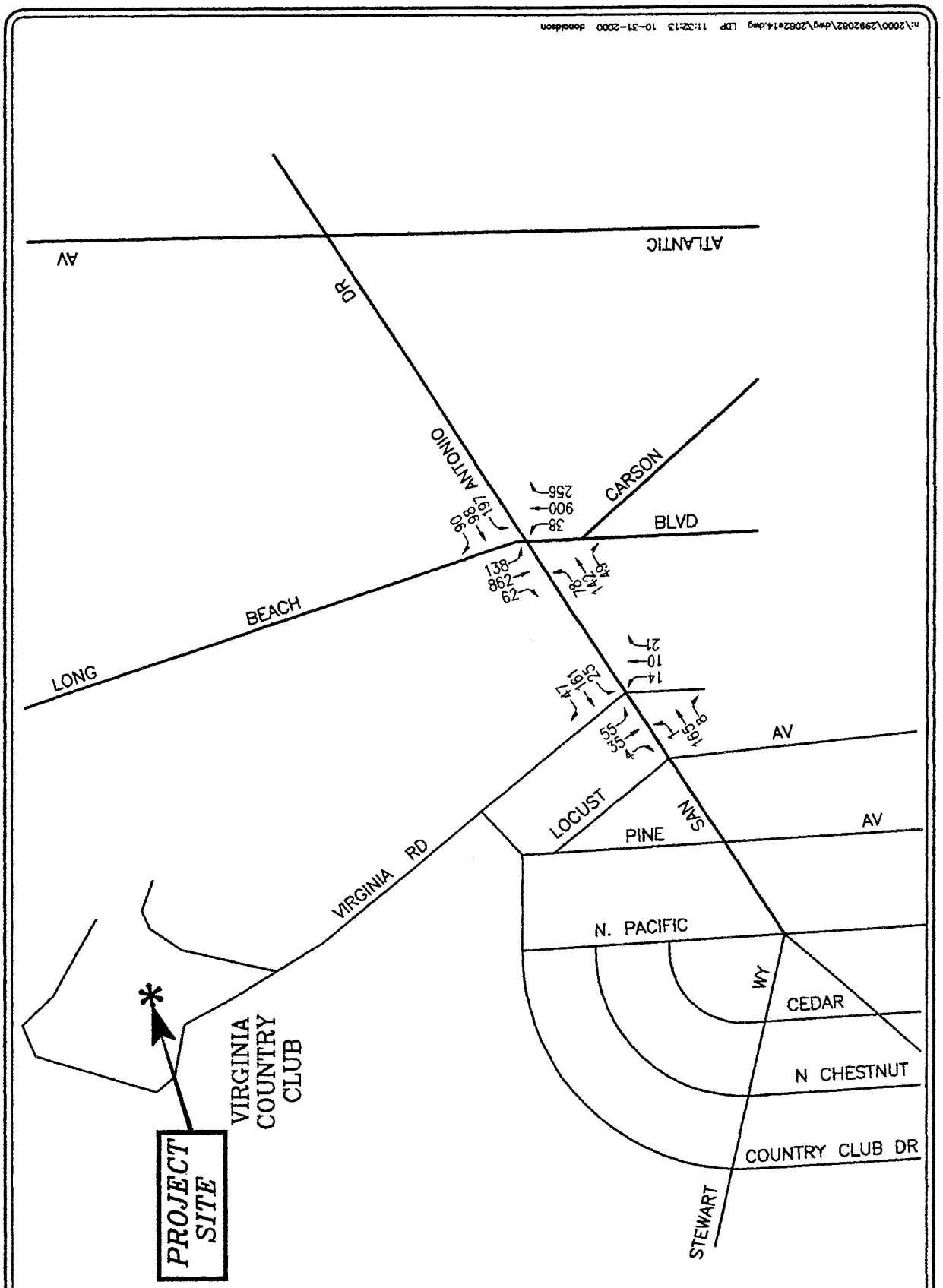


EXHIBIT 14

YEAR 2004 FUTURE BACKGROUND PM PEAK HOUR TRAFFIC VOLUMES WITH "RANCHO" PROJECT TRAFFIC

RANCHO LOS CERRITOS, LONG BEACH

NO SCALE

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TRAFFIC IMPACT ANALYSIS METHODOLOGY

Impact Criteria and Thresholds

The relative traffic impacts of the added traffic volumes generated by the proposed Rancho Los Cerritos Master Plan during the AM and PM peak hours of a "typical" weekday were evaluated based on analysis of Year 2004 future operating conditions at the two key study intersections, without, then with, the proposed project. The previously discussed capacity analysis procedures were utilized to investigate the future volume-to-capacity relationships and service level characteristics at each study intersection. The significance of the potential impacts of the project at each key intersection was then evaluated using the LOS standards of the City of Long Beach and the traffic impact criteria contained in County of Los Angeles CMP guidelines.

As mentioned earlier, the City of Long Beach considers LOS D (ICU = 0.81 - 0.90) to be the minimum acceptable that should be maintained during the peak commute hours, or the current LOS if that existing LOS is worse than LOS D (i.e. LOS E of F). The LA County CMP criteria identifies a significant project impact when the project increases traffic demand at a study intersection by 2% of capacity (ICU $\geq$ 0.020), causing or worsening unacceptable LOS E or F conditions.

Traffic Impact Analysis Scenarios

The following scenarios are those for which LOS calculations have been performed:

(1) Existing Traffic Conditions
(2) Background (Existing plus Growth to 2004 at 2.0% per year)
(3) Future with Rancho "Growth"
(4) Future with Rancho "Expansion"

PEAK HOUR INTERSECTION CAPACITY ANALYSIS

Year 2004 Horizon Year

Table 7 summarizes the peak hour Level of Service results at the four larger study intersections for the 2004 horizon year. The first column (1) of LOS values in Table 7 presents a summary of existing peak hour traffic conditions (which were also presented in Table 5). The second column (2) lists future Year 2004 background traffic conditions based on existing intersection geometry, but without any project traffic. The third column (3) presents future forecast traffic conditions with the addition of traffic generated by the anticipated increase in annual visitorship to the Rancho (normal Rancho "growth).

TABLE 7

YEAR 2004 PEAK HOUR INTERSECTION CAPACITY ANALYSIS [15]
Ranch Los Cerritos Historic Ranch Master Plan
Long Beach, California

Key Intersections	Time Period	(1) 1999 Existing Traffic Conditions		(2) Year 2004 Background Traffic		(3) Year 2004 Plus Rancho "Growth"		(4) Year 2004 Plus Rancho "Expansion"		(5) Total Rancho Project Impact/ Significance	
		HCM or ICU	LOS	HCM or ICU	LOS	HCM or ICU	LOS	HCM or ICU	LOS	ICU Inc.	Y/N
1) Long Beach Boulevard @ San Antonio Drive	AM	0.586	A	0.631	B	0.632	B	0.632	B	0.000	N
	PM	0.728	C	0.793	C	0.798	C	0.798	C	0.000	N
2) Virginia Road @ San Antonio Drive	AM	3.6 sec/veh	A	4.6 sec/veh	A	4.6 sec/veh	A	4.6 sec/veh	A	--	--
	PM	2.6 sec/veh	A	3.1 sec/veh	A	3.3 sec/veh	A	3.3 sec/veh	A	--	--

15 Appendix B contains LOS calculation sheets for the key study intersections.

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The fourth (4) column summarizes the projected service levels with the addition traffic generated by miscellaneous uses. The fifth column (5) shows the increase in ICU value due to the total added peak hour trips generated by the Rancho and indicates whether the project will have a significant impact.

As previously presented in Table 5, review of this table indicates that the two study intersections currently operate at LOS A or C during the AM and PM peak hour of a "typical" weekday. An analysis of Year 2004 background traffic conditions indicates that both study intersections are expected to continue to operate at acceptable levels of service. However, the intersection of Long Beach Boulevard and San Antonio Drive is expected to deteriorate to LOS B during the AM peak hour.

Review of Columns 3 and 4 of Table 7 indicate that traffic associated with the projected increases in Rancho's annual attendance ***will not*** have a significant impact at either of the two study intersections, when compared to the City of Long Beach LOS standards and County of Los Angeles CMP impact criteria. No change in forecast service levels is anticipated with the addition of new Rancho traffic (comparison of column 2 with 3 and 4 of Table 7). Given the "weekday" traffic generation potential of the project, it is clear that the implementation of the Rancho Los Cerritos Historic Ranch Master Plan does not have a significant traffic impact on the local arterial network[16].

PROJECT-SPECIFIC INTERSECTION IMPROVEMENTS

The intersection level of service results summarized in Table 7 indicates that the implementation of the Rancho Los Cerritos Historic Ranch Master Plan is not expected to have a significant traffic impact at either of the two key study intersections when compared to the LOS standards of the City of Long Beach. Therefore, no project-specific intersection mitigation measures are required of the Rancho Los Cerritos Historic Ranch.

16 As previously mentioned, this analysis conservatively assumes that the Rancho will reach its full trip generating potential by the Year 2004.

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SITE ACCESS/CIRCULATION EVALUATION

As shown on Exhibit 2A and 2B, access to the Rancho is by the existing gated entry on Virginia Road. Passenger car, bus and service vehicular access will utilized this entry to access the Rancho. School buses are expected to enter the Rancho and drop off students at the Visitor Center. It is our understanding that the school buses park along Virginia Road and wait until the student tour of the Rancho is completed. Based on projected project traffic volumes, this driveway will be able to accommodate anticipated ingress and egress traffic without undue congestion.

Further review of the site plan reveals adequate on-site circulation. Curb return radii have been confirmed and are adequate for buses and for smaller service/delivery trucks.

However, we recommend that the final site plan be reviewed in detail, using vehicle turning templates ASSHTO SU-30 and B-40, to ensure that buses and trash trucks can properly access and circulate within the parking area adjacent to Visitor Center and Forecourt Parking area.

PARKING ANALYSIS

The purpose of the parking study is to determine the number of parking spaces that are needed to currently support the day-to-day operations of the Rancho on a "typical" weekday and weekend day, and at completion of Master Plan. This parking analysis is based on our evaluation of the Rancho's current operations, review of annual visitor attendance projections, and the results of recent field studies conducted at the Rancho itself, as well as the application of Urban Land Institute's (ULI) *Shared Parking* methodology. The analysis also identifies the parking impacts associated with normal growth in Rancho's annual attendance, renovation/remodel of existing Rancho's facilities, and construction of a new Visitor Center.

Analyzing the supply-demand relationship involves the determination of parking demands and measuring the forecast against the existing and/or future parking supply. In general, there are three methods, which can be employed to establish parking demand. They include: 1) the application of City parking code requirements, 2) using actual (measured) peak demand figures in place of code, and 3) an analysis of the shared parking usage patterns throughout the day, recognizing that the parking demand varies over time. The parking demand study for the Rancho Los Cerritos Historic Ranch is based partly on the last two methods of analyses identified above.

Parking Surveys

To determine the existing parking demands of the Rancho Los Cerritos Historic Ranch, parking accumulation surveys were performed and evaluated. Accutek conducted parking surveys over a five-day in December 1999.

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The count dates were as follows:

- Thursday, December 16, 1999;
- Friday, December 17, 1999
- Saturday, December 18, 1999;
- Sunday, December 19, 1999; and
- Monday, December 20, 1999.

The parking surveys were performed on these dates at half-hour intervals between the hours of 9:30 AM and 6:00 PM. The areas surveyed include the Rancho's parking lot and Virginia Road, both north of and south of the driveway to the Virginia County Club. **Appendix A** contains the detailed parking survey count sheets. Review of the detailed count sheets indicate that curbside parking on Virginia Road was rarely utilized.

The parking surveys were conducted at the Rancho during these days and hours to reflect the parking demands on a "typical" weekday and "typical" weekend day, with no special events. As mentioned earlier, the Rancho is closed to the general public on Mondays and Tuesdays. The results of the on-site parking surveys are summarized in **Table 8**.

A comparison of the figures in Table 8 indicates that the existing weekday and weekend parking demand characteristics of the Rancho Los Cerritos Historic Ranch are relatively consistent during the general public visitation hours (1:00 PM to 5:00 PM). Please note that a "Holiday Open House" event was scheduled on Thursday, December 16, 1999. Based on the results of the parking surveys, we conclude that the Rancho has a sufficient amount of parking to support its existing uses and associated parking demand.

Vehicle Occupancy Surveys

In addition to the parking surveys, "informal spot" occupancy surveys of tour visitor vehicles were performed by the Rancho's staff. **Table 9** summarizes the results of the "informal" survey. An analysis of this data results in an average vehicle occupancy of 2.8 visitors (persons) per vehicle during a "typical" weekday, and 2.5 persons per vehicle during a "typical" weekend day. These figures will be used to forecast the future parking needs of the Rancho's tour attendees.

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TABLE 8

SUMMARY OF ON-SITE PARKING SURVEY DATA
Rancho Los Cerritos Historic Ranch *Master Plan Implementation*
Long Beach, CA

Time of Day	Number of Cars Parked On-Site				
	Thursday Dec 16, 1999	Friday Dec 17, 1999	Saturday [1] Dec 18, 1999	Sunday [1] Dec 19, 1999	Monday Dec 20, 1999
9:30 AM	10	4	-	-	7
10:00 AM	10	3	-	-	7
10:30 AM	11	3	-	-	7
11:00 AM	12	3	-	-	7
11:30 AM	10	3	-	-	**9**
12:00 PM	13	3	-	-	**9**
12:30 PM	13	3	3	6	8
1:00 PM	**14**	3	5	10	6
1:30 PM	9	4	4	14	6
2:00 PM	9	5	**8**	**15**	6
2:30 PM	9	5	**8**	14	6
3:00 PM	8	**9**	7	14	6
3:30 PM	8	5	6	8	5
4:00 PM	7	5	5	4	3
4:30 PM	7	7	3	2	2
5:00 PM	7	7	3	2	3
5:30 PM	9	6	3	1	3

Notes:
[1] Please note that the weekend hours of operation of the Rancho are between 1:00 PM and 5:00 PM.
BOLD, shaded data represent the peak parking demand for each respective count day.

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TABLE 9

AVERAGE VEHICLE OCCUPANCY SUMMARY
Rancho Los Cerritos Historic Ranch Master Plan Implementation
Long Beach, CA

Date	Vehicle Trips			Bus Trips			Walk-In Trips	Total Persons
	Persons	Vehicles	Persons per Vehicle	Persons	Buses	Persons per Bus		
August 4, 1999	32	12	2.7	-	-	-	1	33
August 5, 1999	13	5	2.6	-	-	-	3	16
August 6, 1999	18	9	2.0	-	-	-	-	18
August 7, 1999	37	16	2.3	-	-	-	6	43
August 11, 1999	24	8	3.0	-	-	-	-	24
August 12, 1999	137	43	3.2	-	-	-	11	148
August 13, 1999	15	5	3.0	-	-	-	-	15
August 14, 1999	23	9	2.6	-	-	-	-	23
August 15, 1999	10	4	2.5	-	-	-	-	10
August 18, 1999	17	6	2.8	-	-	-	-	17
August 19, 1999	21	10	2.1	-	-	-	-	21
August 20, 1999	25	11	2.3	-	-	-	2	27
August 21, 1999	42	17	2.5	-	-	-	2	44
August 22, 1999	28	8	3.5	-	-	-	-	28
August 25, 1999	8	4	2.0	55	1	55	-	63
August 26, 1999	250	49	5.1	54	3	18	-	304
August 27, 1999	5	3	1.7	-	-	-	-	5
August 29, 1999	15	4	3.8	-	-	-	-	15
MONTH AVERAGE	720	223	3.2	109	4	27.3	25	854

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TABLE 9 (CONTINUED)

AVERAGE VEHICLE OCCUPANCY SUMMARY
Rancho Los Cerritos Historic Ranch Master Plan Implementation
Long Beach, CA

Date	Vehicle Trips			Bus Trips			Walk-In Trips	Total Persons
	Persons	Vehicles	Persons per Vehicle	Persons	Buses	Persons per Bus		
September 1, 1999	16	4	4.0	-	-	-	2	18
September 2, 1999	38	15	2.5			-	2	40
September 3, 1999	12	5	2.4	16	1	16	-	28
September 4, 1999	20	7	2.9	-	-	-	-	20
September 7, 1999	6	3	2.0	-	-	-	-	6
September 10, 1999	6	4	1.5	-	-	-	-	6
September 11, 1999	23	7	3.3	-	-	-	1	24
September 12, 1999	16	6	2.7	-	-	-	-	16
September 16, 1999	11	6	1.8	-	-	-	3	14
September 17, 1999	10	6	1.7	-	-	-	-	10
September 18, 1999	15	9	1.7	-	-	-	1	16
September 19, 1999	25	10	2.5	-	-	-	5	30
September 22, 1999	8	3	2.7	-	-	-	-	8
September 23, 1999	5	3	1.7	-	-	-	2	7
September 24, 1999	3	2	1.5	-	-	-	1	4
September 25, 1999	16	7	2.3	-	-	-	-	16
September 26, 1999	16	7	2.3	-	-	-	-	16
MONTH AVERAGE	**246**	**104**	**2.4**	**16**	**1**	**16.0**	**17**	**279**

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TABLE 9 (CONTINUED)

AVERAGE VEHICLE OCCUPANCY SUMMARY
Rancho Los Cerritos Historic Ranch Master Plan Implementation
Long Beach, CA

Date	Vehicle Trips			Bus Trips			Walk-In Trips	Total Persons
	Persons	Vehicles	Persons per Vehicle	Persons	Buses	Persons per Bus		
October 1, 1999	11	5	2.2	-	-	-	-	11
October 2, 1999	19	10	1.9	16	1	16	-	35
October 3, 1999	30	14	2.1	-	-	-	-	30
October 6, 1999	11	6	1.8	-	-	-	-	11
October 7, 1999	17	9	1.9	-	-	-	-	17
October 8, 1999	4	2	2.0	-	-	-	-	4
October 10, 1999	17	7	2.4	-	-	-	-	17
October 15, 1999	4	1	4.0	-	-	-	2	6
October 16, 1999	28	11	2.5	-	-	-	-	28
October 17, 1999	29	10	2.9	-	-	-	-	29
October 21, 1999	4	3	1.3	-	-	-	-	4
October 22, 1999	3	1	3.0	-	-	-	-	3
October 23, 1999	19	7	2.7	-	-	-	4	23
October 24, 1999	19	8	2.4	-	-	-	3	22
October 28, 1999	4	2	2.0	-	-	-	-	4
October 29, 1999	3	2	1.5	-	-	-	2	5
October 31, 1999	14	7	2.0	-	-	-	-	14
MONTH AVERAGE	236	105	2.2	16	1	16.0	11	263

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TABLE 9 (CONTINUED)

AVERAGE VEHICLE OCCUPANCY SUMMARY
Rancho Los Cerritos Historic Ranch Master Plan Implementation
Long Beach, CA

Date	Vehicle Trips			Bus Trips			Walk-In Trips	Total Persons
	Persons	Vehicles	Persons per Vehicle	Persons	Buses	Persons per Bus		
November 3, 1999	6	2	3.0	-	-	-	-	6
November 4, 1999	4	3	1.3	-	-	-	-	4
November 6, 1999	18	8	2.3	-	-	-	-	18
November 10, 1999	9	5	1.8	-	-	-	-	9
November 11, 1999	13	5	2.6	-	-	-	-	13
November 12, 1999	12	5	2.4	-	-	-	-	12
November 13, 1999	28	12	2.3	-	-	-	-	28
November 18, 1999	14	4	3.5	-	-	-	-	14
November 19, 1999	7	4	1.8	-	-	-	-	7
November 20, 1999	4	4	1.0	-	-	-	2	6
November 21, 1999	17	7	2.4	-	-	-	-	17
November 24, 1999	12	8	1.5	-	-	-	1	13
November 27, 1999	25	10	2.5	-	-	-	2	27
MONTH AVERAGE	169	77	2.2	-	-	-	5	174

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TABLE 9 (CONTINUED)

AVERAGE VEHICLE OCCUPANCY SUMMARY
Rancho Los Cerritos Historic Ranch Master Plan Implementation
Long Beach, CA

Date	Vehicle Trips			Bus Trips			Walk-In Trips	Total Persons
	Persons	Vehicles	Persons per Vehicle	Persons	Buses	Persons per Bus		
December 1, 1999	11	5	2.2	-	-	-	2	13
December 3, 1999	1	1	1.0	-	-	-	-	1
December 5, 1999	20	7	2.9	-	-	-	-	20
December 8, 1999	17	4	4.3	-	-	-	-	17
December 9, 1999	9	3	3.0	-	-	-	-	9
December 10, 1999	28	21	1.3	-	-	-	-	28
December 15, 1999	6	3	2.0	-	-	-	1	7
MONTH AVERAGE	92	44	2.1	-	-	-	3	95
TOTAL AVERAGE	1,463	553	2.6	141	6	23.5	61	1,665
WEEKEND AVERAGE	537	219	2.5	16	1	16.0	26	579
WEEKDAY AVERAGE	926	334	2.8	125	5	25.0	35	1,086

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PARKING DEMAND PROJECTIONS

Parking demand for the Rancho Los Cerritos Historic Ranch was estimated by studying the operating schedule of the Rancho, employee/docent work schedules, as well as the expected number of daily visitors, and average vehicle ridership. The parking demand will vary throughout the weekday and weekend depending on all these factors, as illustrated by the results of the existing parking surveys performed at the site in December 1999.

The "existing" and future peak parking demands for the Rancho Los Cerritos Historic Ranch was determined in a manner similar to the trip generation, using existing and projected daily (weekday and weekend) attendance figures, and the Rancho's operating schedule. This data was used to develop person-trip estimates, and consequently, vehicle trip estimates.

In order to project an accurate parking demand specifically for Rancho Los Cerritos, we have developed a parking model. The parking model specifically focuses on the combined demand patterns of the Rancho's administration and staff visitor parking needs, volunteer/docent parking demands, and parking requirements for both visitors of the general tour and participants of special classes/lectures.

The parking model for the Rancho projects the "existing" and future parking demands of the Rancho during a "typical" weekday and weekend day. Under this design scenario, weekday and weekend day attendance figures of the Rancho's general tour and special classes/lectures are used, as well as existing employee and volunteer information. The Parking Model for the Rancho was developed using the methodology contained in ULI's *Shared Parking* publication.

Rancho Los Cerritos Historic Ranch Parking Model

As indicated above, the "Shared" Parking Model for the Rancho Los Cerritos Historic Ranch has been prepared for a "typical" weekday and weekend day. The results of the analyses are presented in **Tables 10, 11, 12** and **13**.

Columns (1) through (5) of Tables 10 through 13 present the parking accumulation characteristics and parking demand for employees, staff visitors, and volunteers of the Rancho and the attendees and participants of the Rancho's general tour and special classes/lectures for the hours of 6:00 AM to midnight. Column (6) presents the expected parking demand for the Rancho on an hourly basis. Column (7) presents the hourly net surplus/deficiency in parking spaces for the Rancho.

Tables 10 and 11 apply the "shared" parking model to determine the "existing" weekday and weekend day parking requirements for the Rancho. Tables 12 and 13 summarize the future weekday and weekend day parking demand projections as a result of the Master Plan Implementation.

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TABLE 10

"EXISTING" AVERAGE WEEKDAY HOURLY PARKING DEMAND [1]

Rancho Los Cerritos Historic Ranch *Master Plan Implementation*

Long Beach, CA

USE	(1) Rancho Administration		(2) Rancho Staff Visitors		(3) Rancho Volunteers/Docents		(4) Rancho General Tour		(5) Rancho Misc. Uses		(6)	(7) Comparison with Existing Supply of 70 spaces [3]
SIZE	6 employees		4 visitors		8 docents		37 tour attendees		10 Visitors			
Pkg Rate [2]	@1 sp/employee		@ 1 space/visitor		@1 sp/docent		@1 sp/2.8 attendee		@1 sp/1.5attendee			
Rq'd Spaces	Spaces	6	Spaces	4	Spaces	8	Spaces	13	Spaces	7		
TIME OF DAY	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Total Hourly Parking Demand	Hourly Surplus (+)/ Deficiency (-)
6:00 AM	20%	1	0%	0	0%	0	0%	0	0%	0	1	+69
7:00 AM	20%	1	0%	0	0%	0	0%	0	0%	0	1	+69
8:00 AM	63%	4	50%	2	63%	5	0%	0	0%	0	11	+59
9:00 AM	93%	6	75%	3	93%	7	0%	0	15%	1	17	+53
10:00 AM	100%	6	100%	4	100%	8	0%	0	55%	4	22	+48
11:00 AM	100%	6	100%	4	100%	8	0%	0	70%	5	23	+47
12:00 PM	90%	5	50%	2	90%	7	5%	1	45%	3	18	+52
1:00 PM	90%	5	75%	3	80%	6	30%	4	0%	0	18	+52
2:00 PM	97%	6	100%	4	75%	6	60%	8	0%	0	24	+46
3:00 PM	93%	6	100%	4	75%	6	60%	8	0%	0	24	+46
4:00 PM	77%	5	75%	3	50%	4	15%	2	0%	0	14	+56
5:00 PM	47%	3	50%	2	40%	3	0%	0	0%	0	8	+62
6:00 PM	23%	1	0%	0	0%	0	0%	0	0%	0	1	+69
7:00 PM	20%	1	0%	0	0%	0	0%	0	0%	0	1	+69
8:00 PM	20%	1	0%	0	0%	0	0%	0	0%	0	1	+69
9:00 PM	20%	1	0%	0	0%	0	0%	0	0%	0	1	+69
10:00 PM	20%	1	0%	0	0%	0	0%	0	0%	0	1	+69
11:00 PM	20%	1	0%	0	0%	0	0%	0	0%	0	1	+69
12:00 PM	20%	1	0%	0	0%	0	0%	0	0%	0	1	+69

[1] Hourly weekday parking profiles for Rancho Los Cerritos administration/volunteer uses are based on the Urban Lan Institute (ULI) *Shared Parking* Publication. The parking profiles for Rancho staff visitors, general tours, and classes/lectures are based on existing operations.

[2] Parking rates used to forecast the parking demands are based on average vehicles occupancies observed at the Rancho and LLG recommendations.

[3] Existing parking supply of 70 spaces consists of 34 on-site parking spaces and 36 curbside spaces on Virginia Road, north of the Virginia Country Club Driveway. Note that approximately 90 curbside spaces are provided on Virginia Road, south of the Virginia Country Club Driveway.

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TABLE 11

"EXISTING" AVERAGE WEEKEND DAY HOURLY PARKING DEMAND [1]

Rancho Los Cerritos Historic Ranch *Master Plan Implementation*

Long Beach, CA

USE	(1) Rancho Administration		(2) Rancho Staff Visitors		(3) Rancho Volunteers/Docents		(4) Rancho General Tour		(5) Rancho Misc. Uses		(6)	(7)
SIZE	11 employees		4 visitors		4 docents		56 tour attendees		15 Visitors			Comparison with Existing Supply of 70 spaces [3]
Pkg Rate [2]	@1 sp/1 employee		@ 1 space/visitor		@1 sp/docent		@1 sp/2.5 attendee		@1 sp/1.5 attendee			
Rq'd Spaces	Spaces	11	Spaces	4	Spaces	4	Spaces	22	Spaces	10	Total	Hourly
TIME OF DAY	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Hourly Parking Demand	Surplus (+)/ Deficiency (-)
6:00 AM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+68
7:00 AM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+68
8:00 AM	26%	3	13%	1	25%	1	0%	0	0%	0	5	+65
9:00 AM	39%	4	19%	1	25%	1	0%	0	15%	2	8	+62
10:00 AM	42%	5	23%	1	50%	2	0%	0	55%	6	14	+56
11:00 AM	42%	5	25%	1	50%	2	0%	0	70%	7	15	+55
12:00 PM	38%	4	13%	1	75%	3	5%	1	45%	5	14	+56
1:00 PM	38%	4	19%	1	100%	4	30%	7	0%	0	16	+54
2:00 PM	41%	4	25%	1	100%	4	60%	13	0%	0	22	+48
3:00 PM	39%	4	25%	1	100%	4	60%	13	0%	0	22	+48
4:00 PM	32%	4	19%	1	75%	3	15%	3	0%	0	11	+59
5:00 PM	23%	3	13%	1	50%	2	0%	0	0%	0	6	+64
6:00 PM	23%	3	0%	0	0%	0	0%	0	0%	0	3	+67
7:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+68
8:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+68
9:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+68
10:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+68
11:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+68
12:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+68

[1] Hourly weekend parking profiles for Rancho Los Cerritos administration/volunteer uses are based on the Urban Lan Institute (ULI) *Shared Parking* Publication. The parking profiles for Rancho staff visitors, general tours, and classes/lectures are based on existing operations.

[2] Parking rates used to forecast the parking demands are based on average vehicles occupancies observed at the Rancho and LLG recommendations.

[3] Existing parking supply of 70 spaces consists of 34 on-site parking spaces and 36 curbside spaces on Virginia Road, north of the Virginia Country Club Driveway. Note that approximately 90 curbside spaces are provided on Virginia Road, south of the Virginia Country Club Driveway.

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TABLE 12

"FUTURE" WEEKDAY HOURLY PARKING DEMAND FORECAST [1]

Rancho Los Cerritos Historic Ranch *Master Plan Implementation*

Long Beach, CA

USE	(1) Rancho Administration		(2) Rancho Staff Visitors		(3) Rancho Volunteers/Docents		(4) Rancho General Tour		(5) Rancho Misc. Uses		(6)	(7)
SIZE	11 employees		4 visitors		8 docents		75 tour attendees		21 Visitors			
Pkg Rate [2]	@1 sp/employee		@1 space/visitor		@1 sp/docent		@1 sp/2.8 attendee		@1 sp/1.1attendee			
Rq'd Spaces	Spaces	11	Spaces	4	Spaces	8	Spaces	27	Spaces	18		Comparison with Future Supply of 60 spaces [3]
TIME OF DAY	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Total Hourly Parking Demand	Hourly Surplus (+)/ Deficiency (-)
6:00 AM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58
7:00 AM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58
8:00 AM	63%	7	50%	2	63%	5	0%	0	0%	0	14	+46
9:00 AM	93%	10	75%	3	93%	7	0%	0	15%	3	23	+37
10:00 AM	100%	11	100%	4	100%	8	0%	0	55%	10	33	+27
11:00 AM	100%	11	100%	4	100%	8	0%	0	70%	13	36	+24
12:00 PM	90%	10	50%	2	90%	7	5%	1	45%	8	28	+32
1:00 PM	90%	10	75%	3	80%	6	30%	8	0%	0	27	+33
2:00 PM	97%	11	100%	4	75%	6	60%	16	0%	0	37	+23
3:00 PM	93%	10	100%	4	75%	6	60%	16	0%	0	36	+24
4:00 PM	77%	8	75%	3	50%	4	15%	4	0%	0	19	+41
5:00 PM	47%	5	50%	2	40%	3	0%	0	0%	0	10	+50
6:00 PM	23%	3	0%	0	0%	0	0%	0	0%	0	3	+57
7:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58
8:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58
9:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58
10:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58
11:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58
12:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58

[1] Hourly weekday parking profiles for Rancho Los Cerritos administration/volunteer uses are based on the Urban Lan Institute (ULI) *Shared Parking* Publication. The parking profiles for Rancho staff visitors, general tours, and classes/lectures are based on existing operations.

[2] Parking rates used to forecast the parking demands are based on average vehicles occupancies observed at the Rancho and LLG recommendations.

[3] Proposed parking supply of 60 spaces consists of the 24 spaces proposed in the on-site parking lots and 36 curbside spaces on Virginia Road. north of the Virginia Country Club Driveway. Note that approximately 90 curbside spaces are provided on Virginia Road, south of the Virginia Country Club Driveway.

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TABLE 13

"FUTURE" WEEKEND DAY HOURLY PARKING DEMAND FORECAST [1]

Rancho Los Cerritos Historic Ranch *Master Plan Implementation*

Long Beach, CA

USE	(1) Rancho Administration		(2) Rancho Staff Visitors		(3) Rancho Volunteers/Docents		(4) Rancho General Tour		(5) Rancho Misc. Uses		(6)	(7)
SIZE	11 employees		4 visitors		4 docents		112 tour attendees		31 Visitors			Comparison with Future Supply of 60 spaces [3]
Pkg Rate [2]	@1 sp/1 employee		@ 1 space/visitor		@1 sp/docent		@1 sp/2.5 attendee		@1 sp/1.5 attendee			
Rq'd Spaces	Spaces	11	Spaces	4	Spaces	4	Spaces	45	Spaces	21	Total	
TIME OF DAY	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Percent of Peak Demand	No. of Parking Spaces	Hourly Parking Demand	Hourly Surplus (+)/ Deficiency (-)
6:00 AM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58
7:00 AM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58
8:00 AM	26%	3	13%	1	25%	1	0%	0	0%	0	5	+55
9:00 AM	39%	4	19%	1	25%	1	0%	0	15%	3	9	+51
10:00 AM	42%	5	23%	1	50%	2	0%	0	55%	12	20	+40
11:00 AM	42%	5	25%	1	50%	2	0%	0	70%	15	23	+37
12:00 PM	38%	4	13%	1	75%	3	5%	2	45%	9	19	+41
1:00 PM	38%	4	19%	1	100%	4	30%	14	0%	0	23	+37
2:00 PM	41%	4	25%	1	100%	4	60%	27	0%	0	36	+24
3:00 PM	39%	4	25%	1	100%	4	60%	27	0%	0	36	+24
4:00 PM	32%	4	19%	1	75%	3	15%	7	0%	0	15	+45
5:00 PM	23%	3	13%	1	50%	2	0%	0	0%	0	6	+54
6:00 PM	23%	3	0%	0	0%	0	0%	0	0%	0	3	+57
7:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58
8:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58
9:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58
10:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58
11:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58
12:00 PM	20%	2	0%	0	0%	0	0%	0	0%	0	2	+58

[1] Hourly weekend parking profiles for Rancho Los Cerritos administration/volunteer uses are based on the Urban Lan Institute (ULI) *Shared Parking* Publication. The parking profiles for Rancho staff visitors, general tours, and classes/lectures are based on existing operations.

[2] Parking rates used to forecast the parking demands are based on average vehicles occupancies observed at the Rancho and LLG recommendations.

[3] Proposed parking supply of 60 spaces consists of the 24 spaces proposed in the on-site parking lots and 36 curbside spaces on Virginia Road. north of the Virginia Country Club Driveway. Note that approximately 90 curbside spaces are provided on Virginia Road, south of the Virginia Country Club Driveway.

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The hourly factors shown for the Rancho's administration are taken from ULI, and adjusted slightly to reflect the characteristics of the Rancho. The recommended hourly parking profiles the remaining uses on Tables 4 through 7 are based on the Rancho's existing operations and reflect the anticipated peak demand periods of the general tour and special classes/lectures. The parking demand profile for the Rancho's general tour recognizes the fact that not all tour attendees are on-site at the same time.

The baseline parking needs for Rancho employees, both full-time and part-time, is based on a full-time equivalent staffing of 6 employees, and average vehicle occupancy of 1.0 employee/car. If you recall, the Rancho currently has four part-time employees, of which only two would be on-site at any one-time. Review of the docent/volunteer work schedule indicates that not all volunteers are at the Rancho at the same time; garden and curatorial volunteers and school docents usually work in the morning, while General docents and Visitor Center volunteers work in the afternoon. For this analysis, the baseline parking needs for the docents was estimated to total 8 spaces. The parking needs for staff visitors were estimated to total 4 spaces.

As indicated earlier, the baseline parking needs for the Rancho's General tour and Special Classes/Lectures will be based on the existing and projected average daily attendance. On a "typical" weekday and weekend day, we estimate that the existing parking needs for the General tour will total 13 spaces and 7 spaces, respectively. The weekday baseline parking needs are based on an average daily attendance of 37 visitors, and average vehicle occupancy of 2.8 visitors/vehicle (See Table 9). At 2.5 visitors/car and an average daily attendance of 56 visitors, the weekend day baseline parking needs for tour attendees total 22 spaces. The baseline parking demands for miscellaneous uses (special classes/lectures sponsored by the Rancho) on a weekday and weekend day total 7 spaces and 10 spaces, respectively, and is based on a average vehicle occupancy of 1.5 persons per car. The future baseline parking demands for the general tour and special classes/lectures were projected in the same manner that the "existing" baseline needs were determined.

"Existing" Average Parking Demand

As shown in Table 10, the "existing" peak daytime parking requirement for the Rancho totals 23 spaces, and occurs at 11:00 AM. The "existing" afternoon peak parking demand for the Rancho occurs at 2:00 PM and totals 24 spaces.

Review of Table 11 shows that the "existing" weekend parking needs for the Rancho are slightly less than the weekday parking demand characteristics. During a "typical" weekend day, 15 spaces and 22 spaces are required to support the Rancho's existing morning and afternoon peak parking demands.

Charts 1 and **2**, attached at the end of this letter following the exhibits and tables, graphically present the "existing" weekday and weekend hourly parking demand forecasts.

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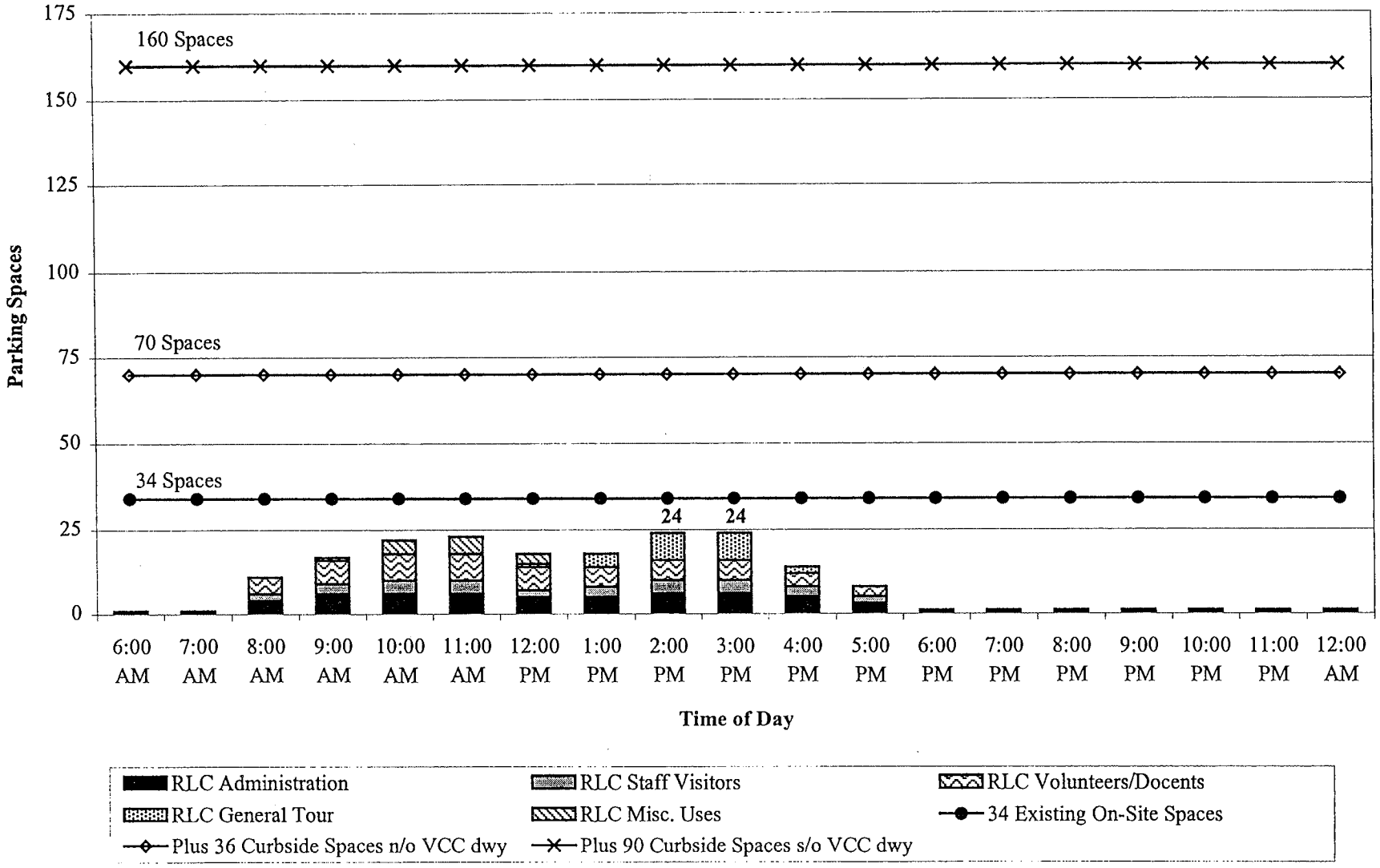


CHART 1

"EXISTING" AVERAGE WEEKDAY HOURLY PARKING DEMAND PROFILE
Rancho Los Cerritos Historic Ranch Master Plan Implementation

LINSCOTT LAW & GREENSPAN
ENGINEERS

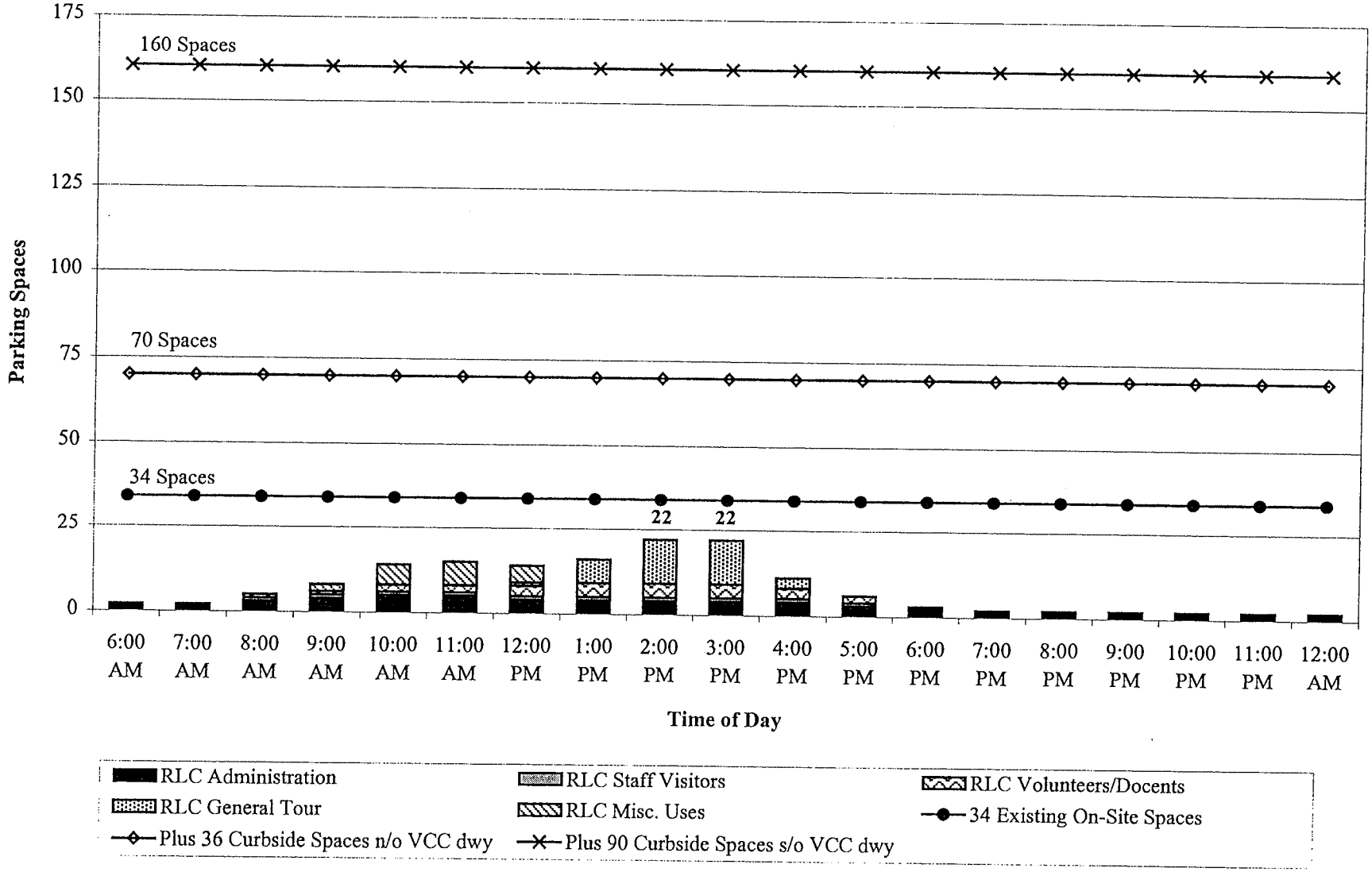


CHART 2

"EXISTING" AVERAGE WEEKEND HOURLY PARKING DEMAND PROFILE
Rancho Los Cerritos Historic Ranch Master Plan Implementation

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Future Parking Demand Forecast

Tables 12 and 13 illustrate the parking impact of additional employees and projected growth in the Rancho's annual attendance. Review of Tables 12 and 13 indicate that growth in the Rancho's annual attendance will increase the afternoon peak parking demand by 13 spaces and 14 spaces and result in a future peak afternoon parking demand of 37 spaces and 36 spaces during a "typical" weekday and weekend day, respectively. The future peak morning and afternoon parking demands of the Rancho, for both a "typical" weekday and weekend day, are expected to occur at 11:00 AM and 2:00 PM.

Charts 3 and **4** graphically present the weekday and weekend day parking demand projections with implementation of the Rancho's Master Plan. In each chart, the total projected parking demand for the Rancho, by time of day, is indicated by the height of the bar graph corresponding to that time. The building blocks of total demand, that is the number of spaces required by each component (employee, staff visitor, volunteer, tour attendees, class participants), is differentiated in each bar by the legend shown at the bottom of each chart. The needed minimum parking supply, which is determined by the highest bar on each graph, is indicated just above that bar. A upper horizontal line on Charts 3 and 4 depict the anticipated parking supply of 150 spaces, which consists of 24 spaces located "on-site", 36 curbside spaces on Virginia Road north of the Virginia County Club Driveway and 90 curbside spaces located south of the Virginia County Club Driveway.

Parking Analysis Conclusions

Review of the graphs in the attached charts demonstrates that the proposed parking supply, which includes the curbside spaces on Virginia Road, typically is more than sufficient. In fact, it is unlikely the curbside spaces on Virginia Road south of the country club driveway will be needed during a "typical" weekday or weekend day. The 24 parking spaces to be provided on-site, plus the 36 curbside spaces located north of the Virginia Country Club driveway will be sufficient to meet the parking demands of employees, staff visitors and volunteers, as well as the parking requirements for visitors of the general tour and participants of special classes and lectures sponsored by the Rancho.

However, according to City staff, on-street parking spaces (i.e. those on Virginia Road) cannot be considered as part of a project's parking supply. Hence, to meet the projected peak parking demands of the Rancho Los Cerritos Historic Ranch Master Plan during a "typical" weekday and weekend day, approximately 13 more parking spaces need to be provided on-site or at an off-site parking lot.

Review of the Rancho's Conceptual Master Plan indicates that additional on-site parking spaces cannot be provided without significantly impacting the proposed restoration improvements. Therefore, we recommend that Rancho Los Cerritos and/or the City of Long Beach Department of Parks, Recreation and Marine investigate the possibility of acquiring property in the immediate vicinity for additional parking.

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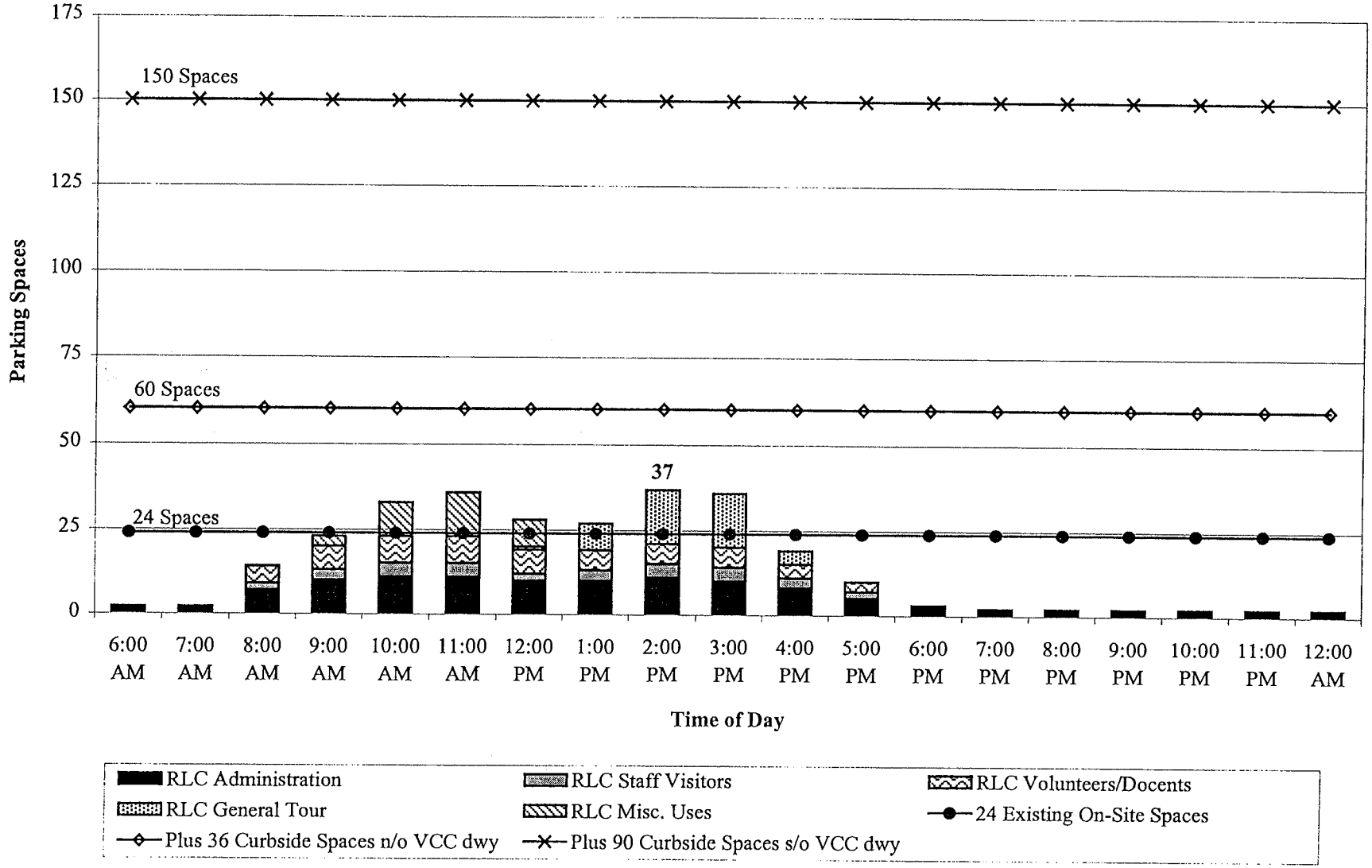


CHART 3

"FUTURE" WEEKDAY HOURLY PARKING DEMAND PROFILE
Rancho Los Cerritos Historic Ranch Master Plan Implementation

LINSCOTT LAW & GREENSPAN
ENGINEERS

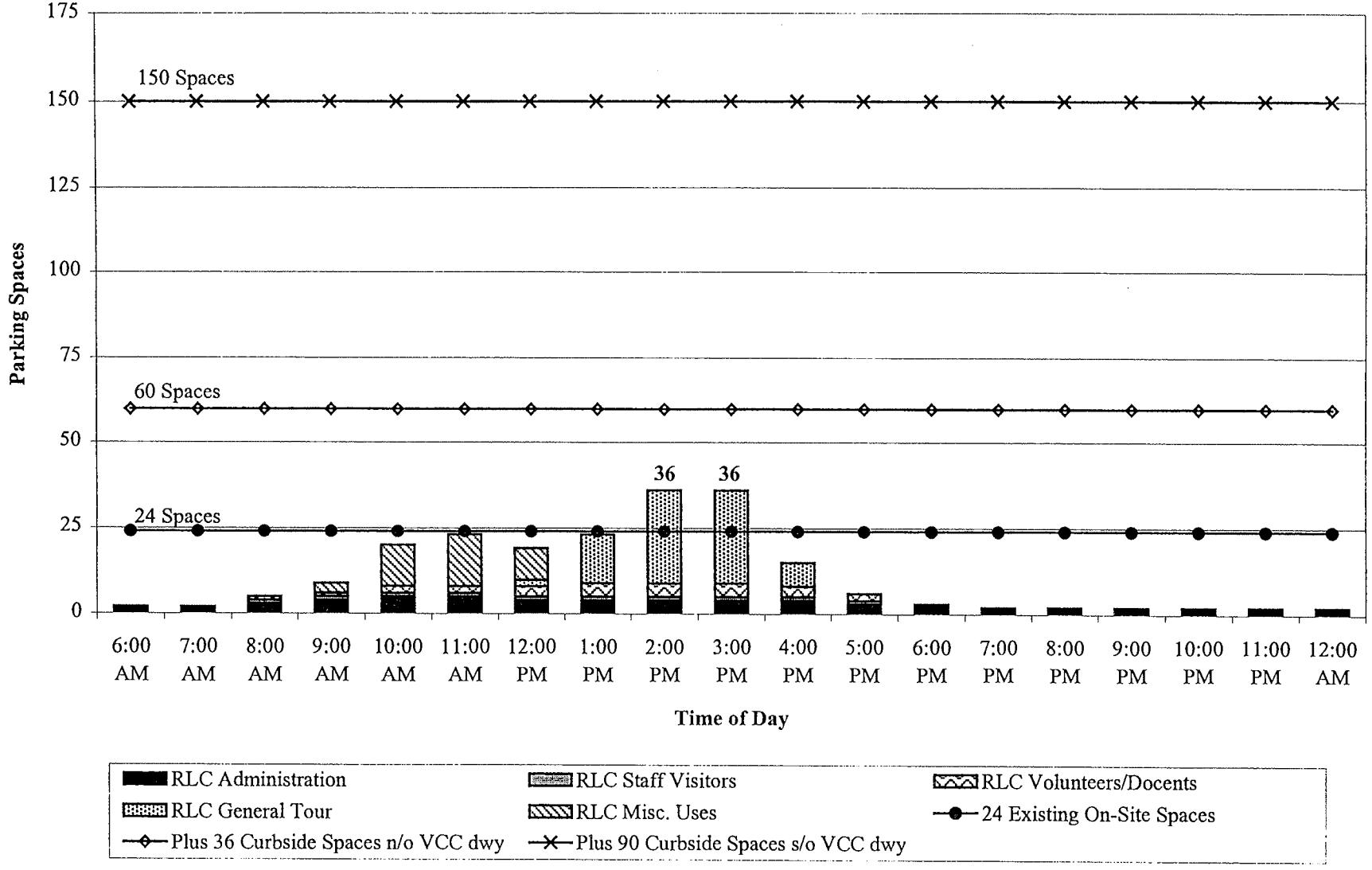


CHART 4

"FUTURE" WEEKEND HOURLY PARKING DEMAND PROFILE
Rancho Los Cerritos Historic Ranch Master Plan Implementation

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SUMMARY OF FINDINGS AND CONCLUSIONS

- ***Master Plan Description:*** The Rancho Los Cerritos Historic Ranch Master Plan includes the construction of a new Visitor Center with a total usable area of approximately 2,120 SF. The reconstructed 1830's Cota adobe will contain a small orientation area, gift shop, video room, and volunteer office. In addition, a two-story Barns Complex (basement included) will be reconstructed to accommodate 9,200 SF of office use, a meeting room with a capacity of 80 persons, storage for archives, artifact collections, and the research library. A new 800 SF Caretaker's residence and a 400 SF workshop/gardener's storage area will also be constructed as part of the Master Plan. Although the Master Plan will be completely implemented in three major phases over a 25-year period, this analysis conservatively assumes that the Rancho will reach it full trip generating potential by the Year 2004.

- ***Study Scope:*** The existing (Year 1999) and future (Year 2004) operating conditions at two intersections, Long Beach Boulevard at San Antonio Drive and Virginia Road at San Antonio Drive, were analyzed to determine the potential traffic impacts of implementation of the Rancho's Master Plan during the AM and PM peak commute hours of a "typical" weekday.

- ***Existing Traffic Conditions:*** Both Long Beach Boulevard at San Antonio Drive and Virginia Road at San Antonio Drive currently operate at LOS C or better during the AM and/or PM peak hour:

- ***Master Plan Trip Generation:*** At completion of the Master Plan, the Rancho Los Cerritos Historic Ranch Site is projected to generate a total of 278 daily trips, with 7 trips (6 inbound, 1 outbound) produced in the AM peak hour and 42 trips (6 inbound, 36 outbound) produced in the PM peak hour on a "typical" weekday.

- ***Near-Term Traffic Conditions:*** Results of the peak hour intersection capacity analysis prepared for the two study intersections indicate that Long Beach Boulevard at San Antonio Drive and Virginia Road at San Antonio Drive are projected to continue to operate at LOS C or better during the AM and/or PM peak hour, with or with the implementation of the Rancho Los Cerritos Historic Ranch Master Plan.

- ***Project-Specific Improvements:*** The final Master Plan site plan must be reviewed in detail, using vehicle-turning templates ASSHTO SU-30 and B-40, to ensure that buses and trash trucks can properly access and circulate/maneuver within the parking area adjacent to Visitor Center and Forecourt Parking area without difficulty.

- ***Parking Demand Analysis:*** The results of the parking analysis indicate that Rancho Los Cerritos Historic Ranch will require 37 spaces and 36 spaces to accommodate the site's peak parking demand during a "typical" weekday and weekend day, respectively. The peak parking

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demands of the Rancho, for both a "typical" weekday and weekend day, are expected to occur at 2:00 PM.

- To meet the projected peak parking demands of the Rancho during a "typical" weekday and weekend day, the Rancho will provide 24 parking spaces on-site, and continue to utilize 36 curbside spaces located on Virginia Road north of the Virginia Country Club driveway.

- However, the City of Long Beach does not consider on-street parking spaces (i.e. those on Virginia Road) as part of a project's parking supply. Hence, to meet the projected peak parking demands of the Rancho Los Cerritos Historic Ranch Master Plan during a "typical" weekday and weekend day, approximately 13 more parking spaces need to be provided on-site or at an off-site parking lot. Review of the Rancho's Conceptual Master Plan indicates that additional on-site parking spaces cannot be provided without significantly impacting the proposed restoration improvements.

- We recommend that Rancho Los Cerritos and/or the City of Long Beach Department of Parks, Recreation and Marine investigate the possibility of acquiring property in the immediate vicinity for additional parking.

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APPENDICES

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APPENDIX A

EXISTING YEAR 1999 TRAFFIC COUNT DATA AND PARKING SURVEY DATA

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TRAFFIC COUNT DATA

<<ACCUTEK>>
<<21114 TRIGGER LANE.>>
<<DIAMOND BAR, CA. 91765>>
<<(909)595-6199 FAX (909)595-6022>>

Site Code : 00264
Start Date: 09/28/
File I.D. : 264702
Page : 1

Movement 1

Start	LONG BEACH BLVD. Southbound					SAN ANTONIO DRIVE Westbound					LONG BEACH BLVD. Northbound					SAN ANTONIO DRIVE Eastbound						
Time	Rght	Thru	Left	TotlOther		Rght	Thru	Left	TotlOther		Rght	Thru	Left	TotlOther		Rght	Thru	Left	TotlOther		Total-	Other=
7:00am	5	116	6	127	0	17	11	43	71	0	24	84	6	114	0	8	10	12	30	0	342	0 342
7:15	11	149	4	164	0	23	15	34	72	0	12	135	5	152	0	7	17	23	47	0	435	0 4
7:30	10	205	7	222	0	27	12	76	115	0	41	149	2	192	0	11	18	13	42	0	571	0 5
7:45	8	197	11	216	0	33	32	56	121	0	33	182	11	226	0	13	13	18	44	0	607	0 607
Hour Total	34	667	28	729	0	100	70	209	379	0	110	550	24	684	0	39	58	66	163	0	1955	0 19
8:00am	16	147	16	179	0	23	33	48	104	0	25	158	11	194	0	10	17	18	45	0	522	0 522
8:15	34	159	17	210	0	20	40	35	95	0	28	136	12	176	0	12	26	26	64	0	545	0 545
8:30	19	145	14	178	0	18	31	41	90	0	26	120	12	158	0	15	32	37	84	0	510	0 5
8:45	14	139	17	170	0	19	16	35	70	0	26	101	13	140	0	17	18	17	52	0	432	0 4
Hour Total	83	590	64	737	0	80	120	159	359	0	105	515	48	668	0	54	93	98	245	0	2009	0 2009
*** Break ***																						
4:00pm	12	199	22	233	0	19	13	46	78	0	48	159	6	213	0	10	31	18	59	0	583	0 5
4:15	12	187	25	224	0	16	19	50	85	0	46	144	7	197	0	12	21	18	51	0	557	0 5
4:30	8	206	21	235	0	17	28	48	93	0	63	152	4	219	0	10	25	12	47	0	594	0 594
4:45	14	185	26	225	0	16	24	49	89	0	51	211	6	268	0	12	25	7	44	0	626	0 626
Hour Total	46	777	94	917	0	68	84	193	345	0	208	666	23	897	0	44	102	55	201	0	2360	0 23
5:00pm	12	197	32	241	0	28	20	44	92	0	69	195	10	274	0	12	28	28	68	0	675	0 675
5:15	16	197	32	245	0	17	21	44	82	0	59	228	10	297	0	7	30	15	52	0	676	0 6
5:30	13	205	35	253	0	21	22	42	85	0	54	184	8	246	0	10	35	14	59	0	643	0 6
5:45	15	172	33	220	0	15	33	27	75	0	55	153	13	221	0	11	20	10	41	0	557	0 557
Hour Total	56	771	132	959	0	81	96	157	334	0	237	760	41	1038	0	40	113	67	220	0	2551	0 2551
Grand	219	2805	318	3342	0	329	370	718	1417	0	660	2491	136	3287	0	177	366	286	829	0	8875	0 88
% of Total	2.5	31.6	3.6%			3.7	4.2	8.1%			7.4	28.1	1.5%			2.0	4.1	3.2%				0.0%100.0
Apprch %			37.7%					16.0%					37.0%						9.3%			
% of Apprc	6.6	83.9	9.5%			23.2	26.1	50.7%			20.1	75.8	4.1%			21.4	44.1	34.5%				

Peak Hour Analysis By Entire Intersection for the Period: 07:00am to 08:45am on 09/28/99

Direction	Street Name	Start Peak Hour	Peak Hr Factor	Volumes Rght	Thru	Left	Total	Percentages Rght	Thru	Left
Southbound	LONG BEACH BLVD.	07:30am	.931	68	708	51	827	8.2	85.6	6.1
Westbound	SAN ANTONIO DRIVE		.899	103	117	215	435	23.6	26.8	49.4
Northbound	LONG BEACH BLVD.		.872	127	625	36	788	16.1	79.3	4.5
Eastbound	SAN ANTONIO DRIVE		.762	46	74	75	195	23.5	37.9	38.4

Peak Hour Analysis By Entire Intersection for the Period: 04:00pm to 05:45pm on 09/28/99

Direction	Street Name	Start Peak Hour	Peak Hr Factor	Volumes Rght	Thru	Left	Total	Percentages Rght	Thru	Left
Southbound	LONG BEACH BLVD.	04:45pm	.953	55	784	125	964	5.7	81.3	12.9
Westbound	SAN ANTONIO DRIVE		.946	82	87	179	348	23.5	25.0	51.4
Northbound	LONG BEACH BLVD.		.913	233	818	34	1085	21.4	75.3	3.1
Eastbound	SAN ANTONIO DRIVE		.820	41	118	64	223	18.3	52.9	28.6

A-1

<<ACCUTEK>>
<<21114 TRIGGER LANE.>>
<<DIAMOND BAR, CA. 91765>>
<<(909)595-6199 FAX (909)595-6022>>

Site Code : 00264701
Start Date: 09/28/99
File I.D. : 264701
Page : 1

Movement 1

Start Time	VIRGINIA ROAD Southbound					SAN ANTONIO DRIVE Westbound					VIRGINIA ROAD Northbound					SAN ANTONIO DRIVE Eastbound					Total-	Other=
	Rght	Thru	Left	Totl	Other	Rght	Thru	Left	Totl	Other	Rght	Thru	Left	Totl	Other	Rght	Thru	Left	Totl	Other		
7:00am	0	0	3	3	0	2	20	1	23	0	5	8	3	16	0	5	23	0	28	0	70	0 70
7:15	0	3	7	10	0	6	20	3	29	0	5	7	0	12	0	1	36	0	37	0	88	0 88
7:30	0	2	7	9	0	5	27	2	34	0	4	9	5	18	0	2	34	0	36	0	97	0 97
7:45	0	3	3	6	0	5	43	1	49	0	3	5	1	9	0	1	35	2	38	0	102	0 102
Hour Total	0	8	20	28	0	18	110	7	135	0	17	29	9	55	0	9	128	2	139	0	357	0 357
8:00am	1	0	3	4	0	9	50	1	60	0	5	7	2	14	0	1	34	0	35	0	113	0 113
8:15	1	2	5	8	0	6	71	1	78	0	2	6	1	9	0	3	63	0	66	0	161	0 161
8:30	0	3	5	8	0	4	42	3	49	0	5	5	4	14	0	2	68	0	70	0	141	0 141
8:45	0	1	5	6	0	8	21	3	32	0	6	8	1	15	0	2	39	0	41	0	94	0 94
Hour Total	2	6	18	26	0	27	184	8	219	0	18	26	8	52	0	8	204	0	212	0	509	0 509
*** Break ***																						
4:00pm	2	4	13	19	0	4	25	8	37	0	3	1	1	5	0	2	34	0	36	0	97	0 97
4:15	1	4	8	13	0	7	28	5	40	0	5	9	2	16	0	1	34	0	35	0	104	0 104
4:30	0	6	10	16	0	9	25	5	39	0	4	3	1	8	0	4	29	1	34	0	97	0 97
4:45	0	5	7	12	0	5	34	4	43	0	8	4	0	12	0	3	21	1	25	0	92	0 92
Hour Total	3	19	38	60	0	25	112	22	159	0	20	17	4	41	0	10	118	2	130	0	390	0 390
5:00pm	0	5	5	10	0	10	32	4	46	0	8	3	4	15	0	0	41	0	41	0	112	0 112
5:15	0	8	7	15	0	10	33	6	49	0	3	1	2	6	0	4	44	0	48	0	118	0 118
5:30	2	2	9	13	0	8	32	6	46	0	5	2	4	11	0	1	36	1	38	0	108	0 108
5:45	0	8	7	15	0	10	49	7	66	0	3	2	3	8	0	2	29	0	31	0	120	0 120
Hour Total	2	23	28	53	0	38	146	23	207	0	19	8	13	40	0	7	150	1	158	0	458	0 458
Grand	7	56	104	167	0	108	552	60	720	0	74	80	34	188	0	34	600	5	639	0	1714	0 1714
% of Total	.4	3.3	6.1%			6.3	32.2	3.5%			4.3	4.7	2.0%			2.0	35.0	.3%				0.0%100.0
Apprch %				9.7%					42.0%					11.0%					37.3%			
% of Apprc	4.2	33.5	62.3%			15.0	76.7	8.3%			39.4	42.6	18.1%			5.3	93.9	.8%				

Peak Hour Analysis By Entire Intersection for the Period: 07:00am to 08:45am on 09/28/99

Direction	Street Name	Start Peak Hour	Peak Hr Factor	Volumes Rght	Volumes Thru	Volumes Left	Volumes Total	Percentages Rght	Percentages Thru	Percentages Left
Southbound	VIRGINIA ROAD	07:45am	.812	2	8	16	26	7.6	30.7	61.5
Westbound	SAN ANTONIO DRIVE		.756	24	206	6	236	10.1	87.2	2.5
Northbound	VIRGINIA ROAD		.821	15	23	8	46	32.6	50.0	17.3
Eastbound	SAN ANTONIO DRIVE		.746	7	200	2	209	3.3	95.6	.9

Peak Hour Analysis By Entire Intersection for the Period: 04:00pm to 05:45pm on 09/28/99

Direction	Street Name	Start Peak Hour	Peak Hr Factor	Volumes Rght	Volumes Thru	Volumes Left	Volumes Total	Percentages Rght	Percentages Thru	Percentages Left
Southbound	VIRGINIA ROAD	05:00pm	.883	2	23	28	53	3.7	43.3	52.8
Westbound	SAN ANTONIO DRIVE		.784	38	146	23	207	18.3	70.5	11.1
Northbound	VIRGINIA ROAD		.667	19	8	13	40	47.5	20.0	32.5
Eastbound	SAN ANTONIO DRIVE		.823	7	150	1	158	4.4	94.9	.6

A-2

ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000296511
Start Date: 12/14/19
File I.D. : 26951NS
Page : 1

Street name :VIRGINIA RD. N/O SAN ANTONIO DR. Direction 1

Begin	<------ NB ------>				<------ SB ------>				<------ Combined ------>				Tuesday
Time	A.M.		P.M.		A.M.		P.M.		A.M.		P.M.		
12:00 12/14	2		18		1		20		3		38		
12:15	0		13		0		16		0		29		
12:30	0		16		0		17		0		33		
12:45	0	2	8	55	0	1	11	64	0	3	19	119	
01:00	0		19		0		14		0		33		
01:15	1		13		0		26		1		39		
01:30	0		5		0		19		0		24		
01:45	0	1	18	55	0	*	19	78	0	1	37	133	
02:00	0		12		0		23		0		35		
02:15	0		8		0		18		0		26		
02:30	0		12		1		8		1		20		
02:45	0	*	12	44	0	1	16	65	0	1	28	109	
03:00	1		14		0		12		1		26		
03:15	0		16		1		17		1		33		
03:30	0		12		0		17		0		29		
03:45	0	1	10	52	0	1	24	70	0	2	34	122	
04:00	0		9		0		10		0		19		
04:15	0		7		2		19		2		26		
04:30	1		5		0		14		1		19		
04:45	2	3	12	33	0	2	10	53	2	5	22	86	
05:00	0		8		0		10		0		18		
05:15	2		8		2		9		4		17		
05:30	4		13		0		16		4		29		
05:45	6	12	8	37	0	2	12	47	6	14	20	84	
06:00	5		8		0		9		5		17		
06:15	2		11		3		16		5		27		
06:30	1		3		3		7		4		10		
06:45	5	13	8	30	3	9	2	34	8	22	10	64	
07:00	9		11		9		2		18		13		
07:15	16		3		4		5		20		8		
07:30	8		6		7		8		15		14		
07:45	11	44	8	28	8	28	6	21	19	72	14	49	
08:00	7		11		5		4		12		15		
08:15	6		13		11		6		17		19		
08:30	14		6		13		4		27		10		
08:45	11	38	8	38	11	40	7	21	22	78	15	59	
09:00	7		6		6		1		13		7		
09:15	10		4		2		3		12		7		
09:30	9		3		9		3		18		6		
09:45	9	35	5	18	8	25	2	9	17	60	7	27	
10:00	8		1		5		0		13		1		
10:15	13		5		8		0		21		5		
10:30	10		0		5		0		15		0		
10:45	12	43	2	8	8	26	2	2	20	69	4	10	
11:00	13		0		9		2		22		2		
11:15	19		3		6		2		25		5		
11:30	14		1		8		1		22		2		
11:45	16	62	1	5	8	31	1	6	24	93	2	11	
Totals	254		403		166		470		420		873		
Day Totals		657				636				1293			
Split %	60.4%		46.1%		39.5%		53.8%						
Peak Hour	11:00		12:15		08:15		01:15		11:00		01:15		
Volume	62		56		41		87		93		135		
P.H.F.	.81		.73		.78		.83		.93		.86		

A-3

ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000296511
Start Date: 12/14/1999
File I.D. : 26951NS
Page : 2

Street name :VIRGINIA RD. N/O SAN ANTONIO DR. Direction 1

Begin	<------ NB ------>				<------ SB ------>				<------ Combined ------>				Wednesday
Time	A.M.		P.M.		A.M.		P.M.		A.M.		P.M.		
12:00 12/15	1		11		0		11		1		22		
12:15	1		10		2		9		3		19		
12:30	0		16		0		16		0		32		
12:45	0	2	16	53	0	2	21	57	0	4	37	110	
01:00	0		7		0		44		0		51		
01:15	0		8		0		30		0		38		
01:30	0		15		0		17		0		32		
01:45	0	*	9	39	0	*	13	104	0	*	22	143	
02:00	0		12		0		18		0		30		
02:15	0		14		0		22		0		36		
02:30	0		13		1		11		1		24		
02:45	0	*	16	55	0	1	24	75	0	1	40	130	
03:00	1		9		0		16		1		25		
03:15	0		11		0		20		0		31		
03:30	0		15		0		17		0		32		
03:45	1	2	14	49	1	1	13	66	2	3	27	115	
04:00	0		14		0		21		0		35		
04:15	0		15		0		17		0		32		
04:30	0		13		0		19		0		32		
04:45	1	1	11	53	0	*	16	73	1	1	27	126	
05:00	1		7		0		12		1		19		
05:15	3		12		0		12		3		24		
05:30	7		14		1		14		8		28		
05:45	3	14	8	41	1	2	12	50	4	16	20	91	
06:00	6		11		2		7		8		18		
06:15	8		19		1		11		9		30		
06:30	21		10		2		8		23		18		
06:45	13	48	9	49	1	6	10	36	14	54	19	85	
07:00	7		8		1		11		8		19		
07:15	8		10		4		11		12		21		
07:30	6		11		6		9		12		20		
07:45	13	34	5	34	17	28	7	38	30	62	12	72	
08:00	7		3		13		11		20		14		
08:15	6		5		10		5		16		10		
08:30	15		4		12		7		27		11		
08:45	15	43	8	20	7	42	9	32	22	85	17	52	
09:00	18		6		13		11		31		17		
09:15	12		2		11		7		23		9		
09:30	9		1		10		2		19		3		
09:45	19	58	3	12	10	44	2	22	29	102	5	34	
10:00	16		4		14		2		30		6		
10:15	15		4		10		1		25		5		
10:30	20		3		16		10		36		13		
10:45	18	69	1	12	15	55	4	17	33	124	5	29	
11:00	18		2		19		0		37		2		
11:15	14		2		18		2		32		4		
11:30	23		3		22		1		45		4		
11:45	12	67	2	9	18	77	2	5	30	144	4	14	
Totals	338		426		258		575		596		1001		
Day Totals		764				833				1597			
Split %	56.7%		42.5%		43.2%		57.4%						
Peak Hour	10:45		03:30		11:00		12:45		10:45		12:30		
Volume	73		58		77		112		147		158		
P.H.F.	.79		.96		.87		.63		.81		.77		

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ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000296511
Start Date: 12/14/19
File I.D. : 26951NS

Street name :VIRGINIA RD. N/O SAN ANTONIO DR. Direction 1 Page : 3

Begin	<------ NB		------><------ SB		------><------Combined		------> Thursday			
Time	A.M.		P.M.		A.M.		P.M.		A.M.		P.M.	
12:00 12/16	2		18		3		14		5		32	
12:15	1		18		1		9		2		27	
12:30	0		15		0		14		0		29	
12:45	0	3	7	58	0	4	18	55	0	7	25	113
01:00	0		15		0		18		0		33	
01:15	0		10		1		31		1		41	
01:30	1		14		1		50		2		64	
01:45	0	1	17	56	1	3	22	121	1	4	39	177
02:00	0		12		0		35		0		47	
02:15	1		8		2		10		3		18	
02:30	0		9		1		13		1		22	
02:45	1	2	17	46	1	4	16	74	2	6	33	120
03:00	0		11		0		19		0		30	
03:15	1		10		1		13		2		23	
03:30	0		11		0		16		0		27	
03:45	0	1	10	42	0	1	16	64	0	2	26	106
04:00	0		4		0		14		0		18	
04:15	0		12		1		21		1		33	
04:30	0		10		1		18		1		28	
04:45	1	1	13	39	1	3	12	65	2	4	25	104
05:00	2		14		0		12		2		26	
05:15	2		22		0		13		2		35	
05:30	6		17		1		7		7		24	
05:45	8	18	12	65	2	3	16	48	10	21	28	113
06:00	7		12		2		17		9		29	
06:15	1		13		4		14		5		27	
06:30	4		14		2		20		6		34	
06:45	8	20	24	63	2	10	8	59	10	30	32	122
07:00	20		13		5		9		25		22	
07:15	41		10		9		8		50		18	
07:30	17		10		10		2		27		12	
07:45	12	90	7	40	8	32	6	25	20	122	13	65
08:00	11		1		7		3		18		4	
08:15	8		6		13		10		21		16	
08:30	10		2		9		1		19		3	
08:45	17	46	14	23	11	40	4	18	28	86	18	41
09:00	10		8		8		3		18		11	
09:15	11		5		11		8		22		13	
09:30	8		5		9		6		17		11	
09:45	12	41	7	25	8	36	22	39	20	77	29	64
10:00	11		4		11		13		22		17	
10:15	7		2		8		2		15		4	
10:30	14		1		9		9		23		10	
10:45	15	47	2	9	10	38	3	27	25	85	5	36
11:00	20		1		9		1		29		2	
11:15	24		1		14		1		38		2	
11:30	26		1		5		0		31		1	
11:45	35	105	1	4	15	43	1	3	50	148	2	7
Totals	375		470		217		598		592		1068	
Day Totals		845				815				1660		
Split %	63.3%		44.0%		36.6%		55.9%					
Peak Hour	11:00		04:45		11:00		01:15		11:00		01:15	
Volume	105		66		43		138		148		191	
P.H.F.	.75		.75		.71		.69		.74		.74	

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ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000296511
Start Date: 12/14/1999
File I.D. : 26951NS
Page : 4

Street name :VIRGINIA RD. N/O SAN ANTONIO DR. Direction 1

Begin Time	<------ NB		------><------ SB		------><------Combined		------> Friday	
	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		
12:00 12/17	1	18	2	10	3	28		
12:15	0	20	0	15	0	35		
12:30	1	10	0	15	1	25		
12:45	0 2	10 58	0 2	7 47	0 4	17 105		
01:00	0	21	1	19	1	40		
01:15	0	11	0	22	0	33		
01:30	0	8	0	14	0	22		
01:45	0 *	16 56	0 1	12 67	0 1	28 123		
02:00	1	11	1	8	2	19		
02:15	1	12	0	17	1	29		
02:30	0	9	0	15	0	24		
02:45	0 2	15 47	1 2	22 62	1 4	37 109		
03:00	1	12	0	23	1	35		
03:15	0	9	0	17	0	26		
03:30	0	15	0	22	0	37		
03:45	0 1	15 51	0 *	15 77	0 1	30 128		
04:00	0	19	0	21	0	40		
04:15	0	8	2	22	2	30		
04:30	0	16	0	18	0	34		
04:45	1 1	16 59	0 2	22 83	1 3	38 142		
05:00	1	14	1	19	2	33		
05:15	5	13	1	22	6	35		
05:30	4	9	1	16	5	25		
05:45	4 14	6 42	2 5	10 67	6 19	16 109		
06:00	6	14	0	24	6	38		
06:15	5	11	2	9	7	20		
06:30	4	17	2	4	6	21		
06:45	2 17	15 57	1 5	9 46	3 22	24 103		
07:00	12	10	6	5	18	15		
07:15	6	15	7	5	13	20		
07:30	15	11	7	7	22	18		
07:45	12 45	11 47	10 30	13 30	22 75	24 77		
08:00	19	5	6	3	25	8		
08:15	12	6	10	5	22	11		
08:30	17	11	9	5	26	16		
08:45	12 60	7 29	7 32	7 20	19 92	14 49		
09:00	11	7	12	5	23	12		
09:15	11	5	16	3	27	8		
09:30	19	8	11	7	30	15		
09:45	16 57	4 24	14 53	5 20	30 110	9 44		
10:00	24	2	6	5	30	7		
10:15	13	3	6	3	19	6		
10:30	15	0	12	10	27	10		
10:45	22 74	3 8	12 36	4 22	34 110	7 30		
11:00	19	5	12	3	31	8		
11:15	18	2	14	3	32	5		
11:30	22	2	12	1	34	3		
11:45	10 69	2 11	9 47	1 8	19 116	3 19		
Totals	342	489	215	549	557	1038		
Day Totals	831		764		1595			
Split %	61.4%	47.1%	38.6%	52.8%				
Peak Hour	10:45	12:15	09:00	02:45	10:45	04:00		
Volume	81	61	53	84	131	142		
P.H.F.	.92	.72	.82	.91	.96	.88		

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ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 00000029511
Start Date: 12/14/19
File I.D. : 26951NS
Page : 5

Street name :VIRGINIA RD. N/O SAN ANTONIO DR. Direction 1 Saturday

Begin Time	<------ NB A.M.		NB P.M.		------><------ SB A.M.		SB P.M.		------><------Combined A.M.		Combined P.M.	
12:00 12/18	1		12		2		9		3		21	
12:15	0		2		3		10		3		12	
12:30	1		9		0		8		1		17	
12:45	1	3	13	36	0	5	13	40	1	8	26	76
01:00	0		9		0		14		0		23	
01:15	0		16		0		13		0		29	
01:30	0		14		1		24		1		38	
01:45	0	*	11	50	1	2	17	68	1	2	28	118
02:00	0		11		0		14		0		25	
02:15	1		11		0		18		1		29	
02:30	0		7		1		18		1		25	
02:45	0	1	7	36	1	2	6	56	1	3	13	92
03:00	0		7		0		13		0		20	
03:15	0		10		0		9		0		19	
03:30	2		14		1		20		3		34	
03:45	0	2	14	45	0	1	18	60	0	3	32	105
04:00	0		15		0		13		0		28	
04:15	1		5		0		11		1		16	
04:30	1		10		1		10		2		20	
04:45	1	3	10	40	1	2	12	46	2	5	22	86
05:00	1		11		0		15		1		26	
05:15	2		9		0		12		2		21	
05:30	5		10		1		5		6		15	
05:45	6	14	22	52	3	4	12	44	9	18	34	96
06:00	7		25		3		9		10		34	
06:15	6		20		3		5		9		25	
06:30	8		22		0		1		8		23	
06:45	9	30	16	83	2	8	8	23	11	38	24	106
07:00	11		17		4		6		15		23	
07:15	8		12		6		14		14		26	
07:30	8		17		4		8		12		25	
07:45	14	41	8	54	5	19	6	34	19	60	14	88
08:00	9		9		4		10		13		19	
08:15	9		5		2		5		11		10	
08:30	9		9		4		6		13		15	
08:45	15	42	3	26	4	14	2	23	19	56	5	49
09:00	14		4		9		7		23		11	
09:15	14		4		10		13		24		17	
09:30	9		5		12		15		21		20	
09:45	8	45	4	17	14	45	13	48	22	90	17	65
10:00	7		5		12		7		19		12	
10:15	12		1		8		29		20		30	
10:30	13		4		12		22		25		26	
10:45	16	48	2	12	15	47	2	60	31	95	4	72
11:00	10		1		9		5		19		6	
11:15	15		1		19		1		34		2	
11:30	11		5		11		2		22		7	
11:45	13	49	7	14	7	46	4	12	20	95	11	26
Totals	278		465		195		514		473		979	
Day Totals		743				709				1452		
Split %	58.7%		47.5%		41.2%		52.5%					
Peak Hour	10:30		05:45		10:30		01:30		10:30		01:15	
Volume	54		89		55		73		109		120	
P.H.F.	.84		.89		.72		.76		.80		.78	

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ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000296511
Start Date: 12/14/1999
File I.D. : 26951NS
Page : 6

Street name :VIRGINIA RD. N/O SAN ANTONIO DR. Direction 1 Sunday

Begin Time	<------ NB A.M.		NB P.M.		------><------ SB A.M.		SB P.M.		------><------Combined A.M.		Combined P.M.		------>
12:00 12/19	1		13		9		7		10		20		
12:15	1		10		2		8		3		18		
12:30	2		11		4		16		6		27		
12:45	0	4	4	38	2	17	10	41	2	21	14	79	
01:00	0		11		1		8		1		19		
01:15	0		9		0		10		0		19		
01:30	1		13		0		13		1		26		
01:45	1	2	14	47	3	4	11	42	4	6	25	89	
02:00	0		11		0		22		0		33		
02:15	0		4		0		5		0		9		
02:30	0		8		1		13		1		21		
02:45	0	*	10	33	0	1	7	47	0	1	17	80	
03:00	0		10		0		13		0		23		
03:15	0		10		0		6		0		16		
03:30	0		17		0		12		0		29		
03:45	0	*	23	60	0	*	6	37	0	*	29	97	
04:00	0		35		0		12		0		47		
04:15	0		21		0		12		0		33		
04:30	1		18		0		8		1		26		
04:45	3	4	16	90	1	1	10	42	4	5	26	132	
05:00	1		13		0		13		1		26		
05:15	3		6		0		16		3		22		
05:30	5		9		2		4		7		13		
05:45	1	10	8	36	0	2	15	48	1	12	23	84	
06:00	5		9		1		8		6		17		
06:15	3		14		1		17		4		31		
06:30	6		13		1		13		7		26		
06:45	6	20	10	46	5	8	22	60	11	28	32	106	
07:00	3		11		1		41		4		52		
07:15	7		6		2		22		9		28		
07:30	4		1		6		9		10		10		
07:45	2	16	6	24	1	10	12	84	3	26	18	108	
08:00	7		2		2		7		9		9		
08:15	2		6		4		4		6		10		
08:30	3		6		1		9		4		15		
08:45	9	21	5	19	6	13	8	28	15	34	13	47	
09:00	7		7		5		16		12		23		
09:15	9		7		10		3		19		10		
09:30	9		4		9		7		18		11		
09:45	11	36	3	21	9	33	7	33	20	69	10	54	
10:00	14		4		7		2		21		6		
10:15	8		3		6		4		14		7		
10:30	6		3		8		3		14		6		
10:45	11	39	3	13	7	28	2	11	18	67	5	24	
11:00	7		2		8		2		15		4		
11:15	13		1		7		1		20		2		
11:30	8		1		6		0		14		1		
11:45	6	34	0	4	5	26	2	5	11	60	2	9	
Totals	186		431		143		478		329		909		
Day Totals		617				621				1238			
Split %	56.5%		47.4%		43.4%		52.5%						
Peak Hour	09:15		03:45		09:15		06:30		09:15		06:15		
Volume	43		97		35		98		78		141		
P.H.F.	.76		.69		.87		.59		.92		.67		

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ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000296511
Start Date: 12/14/19
File I.D. : 26951NS
Page : 7

Street name :VIRGINIA RD. N/O SAN ANTONIO DR. Direction 1 Monday

Begin	<------ NB ------>		<------ SB ------>		<------ Combined ------>			
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		
12:00 12/20	0	20	0	14	0	34		
12:15	2	12	0	8	2	20		
12:30	0	10	0	12	0	22		
12:45	1 3	17 59	4 4	12 46	5 7	29 105		
01:00	1	11	1	34	2	45		
01:15	0	12	1	9	1	21		
01:30	0	6	0	18	0	24		
01:45	1 2	14 43	2 4	22 83	3 6	36 126		
02:00	0	10	0	20	0	30		
02:15	0	7	0	11	0	18		
02:30	1	9	1	10	2	19		
02:45	0 1	17 43	0 1	19 60	0 2	36 103		
03:00	0	8	1	21	1	29		
03:15	0	10	0	17	0	27		
03:30	0	9	0	27	0	36		
03:45	0 *	7 34	0 1	9 74	0 1	16 108		
04:00	0	7	0	15	0	22		
04:15	1	12	2	12	3	24		
04:30	1	9	1	13	2	22		
04:45	1 3	12 40	0 3	16 56	1 6	28 96		
05:00	1	10	1	20	2	30		
05:15	4	9	1	9	5	18		
05:30	5	10	3	13	8	23		
05:45	6 16	11 40	1 6	12 54	7 22	23 94		
06:00	5	7	2	4	7	11		
06:15	1	6	0	3	1	9		
06:30	9	7	0	10	9	17		
06:45	3 18	7 27	5 7	3 20	8 25	10 47		
07:00	6	9	7	2	13	11		
07:15	5	11	6	10	11	21		
07:30	26	4	4	6	30	10		
07:45	21 58	5 29	6 23	7 25	27 81	12 54		
08:00	2	5	6	2	8	7		
08:15	8	7	9	0	17	7		
08:30	6	3	7	2	13	5		
08:45	16 32	6 21	11 33	4 8	27 65	10 29		
09:00	12	6	8	2	20	8		
09:15	9	0	10	0	19	0		
09:30	26	5	10	3	36	8		
09:45	22 69	0 11	10 38	2 7	32 107	2 18		
10:00	20	2	9	0	29	2		
10:15	17	2	11	3	28	5		
10:30	12	1	7	0	19	1		
10:45	22 71	1 6	11 38	0 3	33 109	1 9		
11:00	16	2	21	2	37	4		
11:15	26	0	14	2	40	2		
11:30	16	2	22	1	38	3		
11:45	17 75	1 5	9 66	1 6	26 141	2 11		
Totals	348	358	224	442	572	800		
Day Totals	706		666		1372			
Split %	60.8%	44.7%	39.1%	55.2%				
Peak Hour	09:30	12:00	10:45	02:45	10:45	02:45		
Volume	85	59	68	84	148	128		
P.H.F.	.81	.73	.77	.77	.92	.88		

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Weather :
Counted by:
Board # :
Other :

ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000269821
Start Date: 12/14/1999
File I.D. : 26952NS
Page : 1

Street name :VIRGINIA RD. N/O COUNTRY CLUB RD. Direction 1

Begin	<------ NB ------>				<------ SB ------>				<------Combined------>				Tuesday
Time	A.M.		P.M.		A.M.		P.M.		A.M.		P.M.		
12:00 12/14	0		18		0		8		0		26		
12:15	0		12		0		11		0		23		
12:30	0		7		0		11		0		18		
12:45	0	*	10	47	0	*	11	41	0	*	21	88	
01:00	0		12		0		13		0		25		
01:15	0		14		0		21		0		35		
01:30	0		8		0		23		0		31		
01:45	0	*	7	41	0	*	19	76	0	*	26	117	
02:00	0		5		0		12		0		17		
02:15	0		9		0		10		0		19		
02:30	0		6		0		9		0		15		
02:45	0	*	9	29	0	*	15	46	0	*	24	75	
03:00	0		4		0		34		0		38		
03:15	1		4		1		12		2		16		
03:30	0		6		1		13		1		19		
03:45	0	1	3	17	0	2	4	63	0	3	7	80	
04:00	0		7		0		8		0		15		
04:15	0		6		0		11		0		17		
04:30	0		5		0		21		0		26		
04:45	2	2	7	25	1	1	12	52	3	3	19	77	
05:00	0		2		2		9		2		11		
05:15	1		11		0		5		1		16		
05:30	3		2		0		9		3		11		
05:45	7	11	3	18	0	2	7	30	7	13	10	48	
06:00	4		5		1		9		5		14		
06:15	3		2		1		9		4		11		
06:30	2		1		1		6		3		7		
06:45	4	13	3	11	2	5	5	29	6	18	8	40	
07:00	2		1		2		4		4		5		
07:15	6		2		1		4		7		6		
07:30	10		0		1		3		11		3		
07:45	9	27	1	4	1	5	1	12	10	32	2	16	
08:00	6		4		5		4		11		8		
08:15	6		1		2		0		8		1		
08:30	4		1		3		0		7		1		
08:45	9	25	1	7	5	15	2	6	14	40	3	13	
09:00	6		1		2		2		8		3		
09:15	5		1		2		1		7		2		
09:30	13		0		3		1		16		1		
09:45	5	29	0	2	2	9	0	4	7	38	0	6	
10:00	6		0		6		0		12		0		
10:15	12		0		5		0		17		0		
10:30	9		0		3		0		12		0		
10:45	11	38	1	1	4	18	0	*	15	56	1	1	
11:00	11		0		10		0		21		0		
11:15	23		0		6		0		29		0		
11:30	13		1		3		1		16		2		
11:45	20	67	0	1	5	24	0	1	25	91	0	2	
Totals	213		203		81		360		294		563		
Day Totals		416				441				857			
Split %	72.4%		36.0%		27.5%		63.9%						
Peak Hour	11:00		12:00		11:00		01:00		11:00		01:00		
Volume	67		47		24		76		91		117		
P.H.F.	.72		.65		.6		.82		.78		.83		

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Weather :
Counted by:
Board # :
Other :

ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000269821
Start Date: 12/14/19[illegible]
File I.D. : 26952NS

Street name :VIRGINIA RD. N/O COUNTRY CLUB RD. Direction 1

Begin	<------ NB ------>		<------ SB ------>		<------Combined------>		Wednesday
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.	
12:00 12/15	0	15	0	18	0	33	
12:15	0	12	0	16	0	28	
12:30	0	9	0	9	0	18	
12:45	0 *	11 47	0 *	26 69	0 *	37 116	
01:00	0	7	0	21	0	28	
01:15	0	5	0	36	0	41	
01:30	0	6	0	23	0	29	
01:45	0 *	4 22	0 *	19 99	0 *	23 121	
02:00	0	3	0	9	0	12	
02:15	1	7	0	11	1	18	
02:30	1	7	2	15	3	22	
02:45	0 2	5 22	0 2	12 47	0 4	17 69	
03:00	0	8	0	25	0	33	
03:15	0	4	0	11	0	15	
03:30	0	8	0	15	0	23	
03:45	0 *	12 32	0 *	9 60	0 *	21 92	
04:00	0	5	0	10	0	15	
04:15	0	9	0	18	0	27	
04:30	1	10	1	11	2	21	
04:45	0 1	5 29	0 1	10 49	0 2	15 78	
05:00	1	2	1	13	2	15	
05:15	1	5	0	12	1	17	
05:30	4	5	1	9	5	14	
05:45	6 12	3 15	0 2	12 46	6 14	15 61	
06:00	8	6	0	7	8	13	
06:15	2	11	1	5	3	16	
06:30	6	11	1	4	7	15	
06:45	19 35	4 32	2 4	6 22	21 39	10 54	
07:00	3	2	2	0	5	2	
07:15	7	3	3	14	10	17	
07:30	6	0	6	9	12	9	
07:45	4 20	5 10	2 13	6 29	6 33	11 39	
08:00	12	2	2	6	14	8	
08:15	6	3	1	5	7	8	
08:30	11	1	8	6	19	7	
08:45	13 42	1 7	8 19	5 22	21 61	6 29	
09:00	12	4	3	13	15	17	
09:15	4	0	0	6	4	6	
09:30	7	0	10	6	17	6	
09:45	14 37	1 5	4 17	2 27	18 54	3 32	
10:00	17	1	4	1	21	2	
10:15	19	0	4	1	23	1	
10:30	18	5	4	8	22	13	
10:45	23 77	2 8	10 22	6 16	33 99	8 24	
11:00	22	0	10	2	32	2	
11:15	24	1	9	0	33	1	
11:30	24	2	10	1	34	3	
11:45	23 93	0 3	10 39	0 3	33 132	0 6	
Totals	319	232	119	489	438	721	
Day Totals	551		608		1159		
Split %	72.8%	32.1%	27.1%	67.8%			
Peak Hour	10:45	12:00	10:45	12:45	10:45	12:45	
Volume	93	47	39	106	132	135	
P.H.F.	.96	.78	.97	.73	.97	.82	

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Weather :
Counted by:
Board # :
Other :

ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000269821
Start Date: 12/14/1999
File I.D. : 26952NS
Page : 3

Street name :VIRGINIA RD. N/O COUNTRY CLUB RD. Direction 1 Thursday

Begin	<------ NB ------>				<------ SB ------>				<------Combined------>			
Time	A.M.		P.M.		A.M.		P.M.		A.M.		P.M.	
12:00 12/16	1		28		2		14		3		42	
12:15	0		15		0		8		0		23	
12:30	0		10		0		11		0		21	
12:45	0	1	7	60	0	2	13	46	0	3	20	106
01:00	0		7		0		18		0		25	
01:15	0		5		0		13		0		18	
01:30	0		12		0		55		0		67	
01:45	0	*	9	33	0	*	37	123	0	*	46	156
02:00	0		10		1		23		1		33	
02:15	0		5		0		21		0		26	
02:30	1		6		1		12		2		18	
02:45	0	1	5	26	0	2	6	62	0	3	11	88
03:00	1		5		1		21		2		26	
03:15	1		2		0		14		1		16	
03:30	0		7		1		9		1		16	
03:45	0	2	8	22	0	2	8	52	0	4	16	74
04:00	0		2		0		15		0		17	
04:15	0		3		0		10		0		13	
04:30	0		6		0		19		0		25	
04:45	0	*	6	17	0	*	13	57	0	*	19	74
05:00	1		6		1		4		2		10	
05:15	3		9		1		7		4		16	
05:30	1		15		1		12		2		27	
05:45	8	13	10	40	1	4	13	36	9	17	23	76
06:00	9		6		2		12		11		18	
06:15	3		10		3		13		6		23	
06:30	1		9		0		14		1		23	
06:45	2	15	16	41	0	5	12	51	2	20	28	92
07:00	15		6		2		7		17		13	
07:15	30		3		4		6		34		9	
07:30	40		4		2		3		42		7	
07:45	8	93	2	15	3	11	1	17	11	104	3	32
08:00	9		1		3		5		12		6	
08:15	6		0		6		3		12		3	
08:30	1		4		2		3		3		7	
08:45	10	26	2	7	5	16	0	11	15	42	2	18
09:00	14		3		7		3		21		6	
09:15	5		2		4		8		9		10	
09:30	6		1		3		3		9		4	
09:45	10	35	2	8	5	19	14	28	15	54	16	36
10:00	12		1		3		11		15		12	
10:15	8		1		8		5		16		6	
10:30	9		2		5		2		14		4	
10:45	11	40	1	5	5	21	8	26	16	61	9	31
11:00	11		1		6		2		17		3	
11:15	25		0		13		0		38		0	
11:30	22		0		7		0		29		0	
11:45	35	93	1	2	6	32	0	2	41	125	1	4
Totals	319		276		114		511		433		787	
Day Totals		595				625				1220		
Split %	73.6%		35.0%		26.3%		64.9%					
Peak Hour	07:00		12:00		11:00		01:30		11:00		01:30	
Volume	93		60		32		136		125		172	
P.H.F.	.58		.53		.61		.61		.76		.64	

A-12

Weather :
Counted by:
Board # :
Other :

ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000269821
Start Date: 12/14/199
File I.D. : 26952NS
Page : 4

Street name :VIRGINIA RD. N/O COUNTRY CLUB RD. Direction 1

Begin Time	<------ NB A.M.		NB P.M.		------><------ SB A.M.		SB P.M.		------><------Combined A.M.		Combined P.M.		------> Friday
12:00 12/17	1		9		3		7		4		16		
12:15	0		17		0		4		0		21		
12:30	0		10		0		11		0		21		
12:45	0	1	4	40	0	3	7	29	0	4	11	69	
01:00	0		14		0		12		0		26		
01:15	0		10		0		26		0		36		
01:30	0		10		0		16		0		26		
01:45	0	*	6	40	0	*	12	66	0	*	18	106	
02:00	0		8		0		6		0		14		
02:15	0		13		1		14		1		27		
02:30	1		9		1		11		2		20		
02:45	0	1	7	37	0	2	13	44	0	3	20	81	
03:00	0		9		0		27		0		36		
03:15	1		11		1		14		2		25		
03:30	0		2		0		15		0		17		
03:45	0	1	10	32	0	1	9	65	0	2	19	97	
04:00	0		9		0		16		0		25		
04:15	0		9		0		11		0		20		
04:30	0		3		0		16		0		19		
04:45	1	1	2	23	0	*	22	65	1	1	24	88	
05:00	1		2		0		9		1		11		
05:15	0		2		1		21		1		23		
05:30	3		2		0		14		3		16		
05:45	6	10	1	7	1	2	7	51	7	12	8	58	
06:00	2		4		1		13		3		17		
06:15	6		4		4		9		10		13		
06:30	4		5		1		3		5		8		
06:45	2	14	9	22	0	6	3	28	2	20	12	50	
07:00	3		9		1		4		4		13		
07:15	3		8		4		2		7		10		
07:30	5		4		0		2		5		6		
07:45	7	18	1	22	3	8	5	13	10	26	6	35	
08:00	12		2		1		1		13		3		
08:15	6		1		4		1		10		2		
08:30	14		5		2		4		16		9		
08:45	9	41	5	13	8	15	4	10	17	56	9	23	
09:00	7		3		6		3		13		6		
09:15	8		1		8		2		16		3		
09:30	15		0		3		0		18		0		
09:45	11	41	3	7	5	22	10	15	16	63	13	22	
10:00	10		0		6		5		16		5		
10:15	20		1		1		7		21		8		
10:30	11		0		7		1		18		1		
10:45	19	60	0	1	5	19	12	25	24	79	12	26	
11:00	20		0		9		1		29		1		
11:15	20		3		14		2		34		5		
11:30	17		1		5		3		22		4		
11:45	16	73	1	5	5	33	0	6	21	106	1	11	
Totals	261		249		111		417		372		666		
Day Totals		510				528				1038			
Split %	70.1%		37.3%		29.8%		62.6%						
Peak Hour	10:45		12:15		10:30		02:45		10:45		01:00		
Volume	76		45		35		69		109		106		
P.H.F.	.95		.66		.62		.63		.80		.73		

A-13

Weather :
Counted by:
Board # :
Other :

ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000269821
Start Date: 12/14/1999
File I.D. : 26952NS
Page : 5

Street name :VIRGINIA RD. N/O COUNTRY CLUB RD. Direction 1

Begin	<------ NB		------><------ SB		------><------Combined		------> Saturday		
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.			
12:00 12/18	0	8	0	8	0	16			
12:15	1	9	1	4	2	13			
12:30	0	3	0	9	0	12			
12:45	0 1	7 27	0 1	10 31	0 2	17 58			
01:00	0	9	0	15	0	24			
01:15	0	11	0	9	0	20			
01:30	0	9	0	19	0	28			
01:45	0 *	9 38	0 *	18 61	0 *	27 99			
02:00	0	6	0	11	0	17			
02:15	0	8	0	18	0	26			
02:30	0	5	0	15	0	20			
02:45	0 *	5 24	1 1	10 54	1 1	15 78			
03:00	0	3	0	7	0	10			
03:15	0	4	0	10	0	14			
03:30	1	10	0	12	1	22			
03:45	0 1	7 24	1 1	17 46	1 2	24 70			
04:00	0	11	0	13	0	24			
04:15	0	1	0	11	0	12			
04:30	1	2	0	7	1	9			
04:45	1 2	9 23	1 1	12 43	2 3	21 66			
05:00	2	4	0	10	2	14			
05:15	2	3	0	11	2	14			
05:30	2	4	2	6	4	10			
05:45	4 10	3 14	1 3	5 32	5 13	8 46			
06:00	6	17	2	7	8	24			
06:15	8	13	3	4	11	17			
06:30	9	17	0	1	9	18			
06:45	13 36	11 58	2 7	2 14	15 43	13 72			
07:00	14	10	2	2	16	12			
07:15	7	5	1	2	8	7			
07:30	14	4	3	1	17	5			
07:45	9 44	8 27	5 11	6 11	14 55	14 38			
08:00	8	6	2	4	10	10			
08:15	11	2	2	2	13	4			
08:30	5	3	0	3	5	6			
08:45	8 32	0 11	2 6	1 10	10 38	1 21			
09:00	11	3	2	2	13	5			
09:15	8	1	4	4	12	5			
09:30	7	3	1	13	8	16			
09:45	8 34	4 11	3 10	11 30	11 44	15 41			
10:00	5	1	11	10	16	11			
10:15	6	1	4	8	10	9			
10:30	8	4	5	40	13	44			
10:45	10 29	0 6	8 28	4 62	18 57	4 68			
11:00	9	0	4	2	13	2			
11:15	9	0	11	3	20	3			
11:30	6	1	9	3	15	4			
11:45	9 33	6 7	7 31	2 10	16 64	8 17			
Totals	222	270	100	404	322	674			
Day Totals	492		504		996				
Split %	68.9%	40.0%	31.0%	59.9%					
Peak Hour	06:45	06:00	10:45	09:45	10:45	01:00			
Volume	48	58	32	69	66	99			
P.H.F.	.85	.85	.72	.43	.82	.88			

A-14

Weather :
Counted by:
Board # :
Other :

ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000269821
Start Date: 12/14/19
File I.D. : 26952NS
Page : 6

Street name :VIRGINIA RD. N/O COUNTRY CLUB RD. Direction 1

Begin	<------ NB		------><------ SB		------><------Combined		------> Sunday			
Time	A.M.		P.M.		A.M.		P.M.		A.M.		P.M.	
12:00 12/19	3		5		6		6		9		11	
12:15	3		8		8		12		11		20	
12:30	0		3		2		8		2		11	
12:45	1	7	12	28	2	18	14	40	3	25	26	68
01:00	0		6		0		3		0		9	
01:15	0		8		0		9		0		17	
01:30	0		5		0		11		0		16	
01:45	0	*	14	33	0	*	6	29	0	*	20	62
02:00	1		9		1		12		2		21	
02:15	0		8		0		10		0		18	
02:30	0		7		0		8		0		15	
02:45	0	1	9	33	0	1	8	38	0	2	17	71
03:00	0		6		0		11		0		17	
03:15	0		5		0		9		0		14	
03:30	0		9		0		8		0		17	
03:45	0	*	17	37	0	*	11	39	0	*	28	76
04:00	0		29		0		8		0		37	
04:15	0		26		0		11		0		37	
04:30	0		22		0		6		0		28	
04:45	1	1	10	87	1	1	7	32	2	2	17	119
05:00	1		8		0		4		1		12	
05:15	1		6		0		11		1		17	
05:30	4		3		0		8		4		11	
05:45	4	10	2	19	0	*	5	28	4	10	7	47
06:00	4		1		1		4		5		5	
06:15	5		5		1		8		6		13	
06:30	6		4		0		17		6		21	
06:45	8	23	6	16	0	2	13	42	8	25	19	58
07:00	5		7		4		33		9		40	
07:15	9		4		0		41		9		45	
07:30	6		3		3		19		9		22	
07:45	2	22	1	15	5	12	8	101	7	34	9	116
08:00	3		2		0		4		3		6	
08:15	4		0		1		3		5		3	
08:30	3		2		3		4		6		6	
08:45	3	13	2	6	1	5	2	13	4	18	4	19
09:00	9		0		2		10		11		10	
09:15	12		4		4		8		16		12	
09:30	6		3		5		1		11		4	
09:45	9	36	0	7	5	16	3	22	14	52	3	29
10:00	8		1		9		3		17		4	
10:15	9		1		6		1		15		2	
10:30	4		0		8		0		12		0	
10:45	6	27	1	3	9	32	2	6	15	59	3	9
11:00	11		1		8		3		19		4	
11:15	10		2		8		2		18		4	
11:30	9		0		3		0		12		0	
11:45	6	36	1	4	4	23	1	6	10	59	2	10
Totals	176		288		110		396		286		684	
Day Totals		464				506				970		
Split %	61.5%		42.1%		38.4%		57.8%					
Peak Hour	09:00		03:45		10:30		06:45		10:30		03:45	
Volume	36		94		33		106		64		130	
P.H.F.	.75		.81		.91		.64		.84		.87	

A-15

Weather :
Counted by:
Board # :
Other :

ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000269821
Start Date: 12/14/1999
File I.D. : 26952NS
Page : 7

Street name :VIRGINIA RD. N/O COUNTRY CLUB RD. Direction 1 Monday

Begin	<------ NB		------><------ SB		------><------Combined		------>	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		
12:00 12/20	0	14	0	11	0	25		
12:15	0	15	0	6	0	21		
12:30	1	5	0	6	1	11		
12:45	0 1	9 43	1 1	12 35	1 2	21 78		
01:00	0	7	0	22	0	29		
01:15	0	9	0	25	0	34		
01:30	0	7	0	8	0	15		
01:45	0 *	7 30	0 *	19 74	0 *	26 104		
02:00	1	9	2	31	3	40		
02:15	0	6	0	13	0	19		
02:30	1	6	0	7	1	13		
02:45	0 2	6 27	1 3	6 57	1 5	12 84		
03:00	0	7	0	22	0	29		
03:15	0	3	0	19	0	22		
03:30	0	8	0	15	0	23		
03:45	0 *	3 21	0 *	20 76	0 *	23 97		
04:00	0	2	0	8	0	10		
04:15	2	7	0	8	2	15		
04:30	1	6	2	15	3	21		
04:45	0 3	7 22	0 2	16 47	0 5	23 69		
05:00	2	7	0	9	2	16		
05:15	2	5	1	14	3	19		
05:30	5	6	1	12	6	18		
05:45	4 13	1 19	2 4	10 45	6 17	11 64		
06:00	5	3	2	2	7	5		
06:15	3	2	1	1	4	3		
06:30	3	2	0	7	3	9		
06:45	11 22	2 9	0 3	5 15	11 25	7 24		
07:00	3	1	6	0	9	1		
07:15	4	7	3	4	7	11		
07:30	15	4	1	5	16	9		
07:45	17 39	3 15	2 12	2 11	19 51	5 26		
08:00	7	3	3	4	10	7		
08:15	3	0	3	0	6	0		
08:30	2	2	2	1	4	3		
08:45	12 24	0 5	2 10	0 5	14 34	0 10		
09:00	5	1	5	1	10	2		
09:15	7	0	3	0	10	0		
09:30	19	1	5	0	24	1		
09:45	23 54	1 3	4 17	0 1	27 71	1 4		
10:00	16	0	6	2	22	2		
10:15	11	1	3	0	14	1		
10:30	10	0	6	0	16	0		
10:45	16 53	0 1	8 23	0 2	24 76	0 3		
11:00	9	1	6	0	15	1		
11:15	15	1	12	1	27	2		
11:30	18	0	20	0	38	0		
11:45	15 57	3 5	8 46	2 3	23 103	5 8		
Totals	268	200	121	371	389	571		
Day Totals	468		492		960			
Split %	68.8%	35.0%	31.1%	64.9%				
Peak Hour	09:30	12:00	10:45	01:15	10:45	01:15		
Volume	69	43	46	83	104	115		
P.H.F.	.75	.71	.57	.66	.68	.71		

A-16

Weather :
Counted by:
Board # :
Other :

ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000269541
Start Date: 12/14/19
File I.D. : 26954NS
Page : 1

Street name :DRIVEWAY AT VIRGINIA RD.N/O THE GATE Direction 1

Begin	<------ NB		------><------ SB		------><------Combined		------> Tuesday	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		
12:00 12/14	0	0	0	1	0	1		
12:15	0	0	0	0	0	0		
12:30	0	1	0	0	0	1		
12:45	0 *	0 1	0 *	1 2	0 *	1 3		
01:00	0	0	0	0	0	0		
01:15	0	0	0	0	0	0		
01:30	0	0	0	0	0	0		
01:45	0 *	0 *	0 *	1 1	0 *	1 1		
02:00	0	0	0	1	0	1		
02:15	0	0	0	1	0	1		
02:30	0	0	0	0	0	0		
02:45	0 *	0 *	0 *	1 3	0 *	1 3		
03:00	0	0	0	0	0	0		
03:15	0	0	0	0	0	0		
03:30	0	0	0	2	0	2		
03:45	0 *	0 *	0 *	0 2	0 *	0 2		
04:00	0	0	0	0	0	0		
04:15	0	0	0	0	0	0		
04:30	0	0	0	0	0	0		
04:45	0 *	0 *	0 *	2 2	0 *	2 2		
05:00	0	0	0	0	0	0		
05:15	0	0	0	0	0	0		
05:30	0	0	0	0	0	0		
05:45	1 1	0 *	0 *	1 1	1 1	1 1		
06:00	0	0	0	1	0	1		
06:15	0	0	0	0	0	0		
06:30	0	0	0	0	0	0		
06:45	0 *	0 *	0 *	0 1	0 *	0 1		
07:00	0	0	0	0	0	0		
07:15	0	0	0	0	0	0		
07:30	0	0	0	0	0	0		
07:45	0 *	0 *	2 2	0 *	2 2	0 *		
08:00	0	1	0	1	0	2		
08:15	0	0	0	0	0	0		
08:30	0	0	0	0	0	0		
08:45	2 2	0 1	1 1	0 1	3 3	0 2		
09:00	1	0	0	0	1	0		
09:15	0	0	0	0	0	0		
09:30	1	0	0	0	1	0		
09:45	0 2	0 *	0 *	0 *	0 2	0 *		
10:00	0	0	1	0	1	0		
10:15	0	0	0	0	0	0		
10:30	1	0	0	0	1	0		
10:45	1 2	0 *	2 3	0 *	3 5	0 *		
11:00	0	0	0	0	0	0		
11:15	0	0	1	0	1	0		
11:30	0	0	0	0	0	0		
11:45	0 *	0 *	0 1	0 *	0 1	0 *		
Totals	7	2	7	13	14	15		
Day Totals	9		20		29			
Split %	50.0%	13.3%	50.0%	86.6%				
Peak Hour	08:45	12:00	10:00	01:30	08:45	12:00		
Volume	4	1	3	3	5	3		
P.H.F.	.5	.25	.37	.75	.41	.75		

A-17

Weather :
Counted by:
Board # :
Other :

ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000269541
Start Date: 12/14/1999
File I.D. : 26954NS
Page : 2

Street name :DRIVEWAY AT VIRGINIA RD.N/O THE GATE Direction 1

Begin Time	<------ NB ------> A.M.		P.M.		<------ SB ------> A.M.		P.M.		<------ Combined ------> A.M.		P.M.	
12:00 12/15	0		0		0		0		0		0	
12:15	0		0		0		5		0		5	
12:30	0		1		0		2		0		3	
12:45	0	*	4	5	0	*	2	9	0	*	6	14
01:00	0		1		0		2		0		3	
01:15	0		0		0		0		0		0	
01:30	0		1		0		1		0		2	
01:45	0	*	0	2	0	*	1	4	0	*	1	6
02:00	0		0		0		1		0		1	
02:15	0		0		0		3		0		3	
02:30	0		0		0		0		0		0	
02:45	0	*	0	*	0	*	1	5	0	*	1	5
03:00	0		1		0		0		0		1	
03:15	0		0		0		1		0		1	
03:30	0		0		0		3		0		3	
03:45	0	*	0	1	0	*	0	4	0	*	0	5
04:00	0		1		0		1		0		2	
04:15	0		0		0		0		0		0	
04:30	0		2		0		1		0		3	
04:45	0	*	0	3	0	*	1	3	0	*	1	6
05:00	0		0		0		0		0		0	
05:15	0		0		0		0		0		0	
05:30	0		0		0		3		0		3	
05:45	1	1	0	*	0	*	0	3	1	1	0	3
06:00	0		0		0		2		0		2	
06:15	0		1		0		1		0		2	
06:30	0		0		0		0		0		0	
06:45	0	*	0	1	0	*	0	3	0	*	0	4
07:00	0		0		0		0		0		0	
07:15	0		0		0		0		0		0	
07:30	0		0		0		0		0		0	
07:45	0	*	0	*	0	*	0	*	0	*	0	*
08:00	0		0		0		0		0		0	
08:15	0		0		0		0		0		0	
08:30	1		0		0		0		1		0	
08:45	3	4	0	*	1	1	0	*	4	5	0	*
09:00	5		0		2		0		7		0	
09:15	0		0		1		0		1		0	
09:30	1		0		2		0		3		0	
09:45	0	6	0	*	1	6	0	*	1	12	0	*
10:00	0		0		0		0		0		0	
10:15	1		0		0		0		1		0	
10:30	1		0		0		0		1		0	
10:45	0	2	0	*	2	2	0	*	2	4	0	*
11:00	0		0		1		0		1		0	
11:15	0		0		1		0		1		0	
11:30	0		0		0		0		0		0	
11:45	0	*	0	*	3	5	0	*	3	5	0	*
Totals	13		12		14		31		27		43	
Day Totals		25				45				70		
Split %	48.1%		27.9%		51.8%		72.0%					
Peak Hour	08:15		12:15		08:45		12:15		08:45		12:15	
Volume	9		6		6		11		15		17	
P.H.F.	.45		.37		.75		.55		.53		.70	

Wednesday

A-18

Weather :
Counted by:
Board # :
Other :

ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000269541
Start Date: 12/14/19
File I.D. : 26954NS
Page : 3

Street name :DRIVEWAY AT VIRGINIA RD.N/O THE GATE Direction 1

Begin	<------ NB		------><------ SB		------><------Combined		------> Thursday			
Time	A.M.	P.M.			A.M.	P.M.				
12:00 12/16	0	1	0		2		0		3	
12:15	0	1	0		0		0		1	
12:30	0	0	0		1		0		1	
12:45	0 *	3 5	0 *		4 7		0 *		7	12
01:00	0	0	0		3		0		3	
01:15	0	1	0		3		0		4	
01:30	0	1	0		2		0		3	
01:45	0 *	2 4	0 *		3 11		0 *		5	15
02:00	0	2	0		1		0		3	
02:15	0	0	0		1		0		1	
02:30	0	2	0		2		0		4	
02:45	0 *	0 4	0 *		0 4		0 *		0	8
03:00	0	1	0		2		0		3	
03:15	0	1	0		1		0		2	
03:30	0	1	0		3		0		4	
03:45	0 *	1 4	0 *		2 8		0 *		3	12
04:00	0	0	0		0		0		0	
04:15	0	1	0		0		0		1	
04:30	0	1	0		1		0		2	
04:45	0 *	0 2	0 *		1 2		0 *		1	4
05:00	0	3	0		5		0		8	
05:15	0	3	0		3		0		6	
05:30	0	5	0		13		0		18	
05:45	0 *	2 13	0 *		8 29		0 *		10	42
06:00	0	3	0		3		0		6	
06:15	0	3	0		3		0		6	
06:30	0	2	0		12		0		14	
06:45	0 *	0 8	0 *		11 29		0 *		11	37
07:00	0	0	0		5		0		5	
07:15	0	1	0		8		0		9	
07:30	0	0	0		1		0		1	
07:45	0 *	0 1	0 *		0 14		0 *		0	15
08:00	1	0	2		2		3		2	
08:15	0	0	1		2		1		2	
08:30	0	0	0		0		0		0	
08:45	1 2	0 *	1 4		0 4		2 6		0	4
09:00	4	0	10		0		14		0	
09:15	1	0	5		3		6		3	
09:30	1	0	2		0		3		0	
09:45	2 8	0 *	0 17		0 3		2 25		0	3
10:00	1	0	2		0		3		0	
10:15	2	0	3		0		5		0	
10:30	0	0	2		0		2		0	
10:45	1 4	0 *	0 7		0 *		1 11		0	*
11:00	1	0	5		0		6		0	
11:15	2	0	2		0		4		0	
11:30	2	0	2		0		4		0	
11:45	0 5	0 *	0 9		0 *		0 14		0	*
Totals	19	41	37		111		56		152	
Day Totals	60		148				208			
Split %	33.9%	26.9%	66.0%		73.0%					
Peak Hour	09:00	05:00	08:45		06:30		08:45		05:00	
Volume	8	13	18		36		25		42	
P.H.F.	.5	.65	.45		.75		.44		.58	

A-19

Weather :
Counted by:
Board # :
Other :

ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000269541
Start Date: 12/14/1999
File I.D. : 26954NS
Page : 4

Street name :DRIVEWAY AT VIRGINIA RD.N/O THE GATE Direction 1

Friday

Begin	<------ NB		------><------ SB		------><------Combined		------>	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		
12:00 12/17	0	0	0	0	0	0		
12:15	0	1	0	2	0	3		
12:30	0	0	0	0	0	0		
12:45	0 *	0 1	0 *	2 4	0 *	2 5		
01:00	0	1	0	2	0	3		
01:15	0	2	0	3	0	5		
01:30	0	1	0	5	0	6		
01:45	0 *	0 4	0 *	0 10	0 *	0 14		
02:00	0	2	0	2	0	4		
02:15	0	1	0	3	0	4		
02:30	0	1	0	0	0	1		
02:45	0 *	2 6	0 *	3 8	0 *	5 14		
03:00	0	1	0	3	0	4		
03:15	0	1	0	2	0	3		
03:30	0	0	0	1	0	1		
03:45	0 *	2 4	0 *	2 8	0 *	4 12		
04:00	0	1	0	1	0	2		
04:15	0	2	0	5	0	7		
04:30	0	0	0	0	0	0		
04:45	0 *	1 4	0 *	2 8	0 *	3 12		
05:00	0	0	0	1	0	1		
05:15	0	0	0	2	0	2		
05:30	0	0	0	1	0	1		
05:45	0 *	1 1	0 *	1 5	0 *	2 6		
06:00	0	0	0	0	0	0		
06:15	0	0	0	1	0	1		
06:30	0	0	0	0	0	0		
06:45	0 *	0 *	0 *	0 1	0 *	0 1		
07:00	0	0	0	0	0	0		
07:15	0	0	0	0	0	0		
07:30	0	0	1	0	1	0		
07:45	0 *	0 *	0 1	0 *	0 1	0 *		
08:00	0	0	0	0	0	0		
08:15	0	0	0	0	0	0		
08:30	1	0	1	0	2	0		
08:45	2 3	0 *	0 1	0 *	2 4	0 *		
09:00	2	0	1	0	3	0		
09:15	0	0	0	0	0	0		
09:30	1	0	1	0	2	0		
09:45	0 3	0 *	1 3	0 *	1 6	0 *		
10:00	0	0	0	0	0	0		
10:15	1	0	1	0	2	0		
10:30	0	0	0	0	0	0		
10:45	1 2	0 *	0 1	0 *	1 3	0 *		
11:00	0	0	2	0	2	0		
11:15	0	0	0	0	0	0		
11:30	1	0	0	0	1	0		
11:45	0 1	0 *	1 3	0 *	1 4	0 *		
Totals	9	20	9	44	18	64		
Day Totals	29		53		82			
Split %	50.0%	31.2%	50.0%	68.7%				

Peak Hour	08:15	02:00	09:00	12:45	08:15	12:45
Volume	5	6	3	12	7	16
P.H.F.	.62	.75	.75	.6	.58	.66

A-20

Weather :
Counted by:
Board # :
Other :

ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000269541
Start Date: 12/14/19
File I.D. : 26954NS
Page : 5

Street name :DRIVEWAY AT VIRGINIA RD.N/O THE GATE Direction 1

Begin	<------ NB		------><------ SB		------><------Combined		------> Saturday	
Time	A.M.	P.M.	A.M.	P.M.	A.M.	P.M.		
12:00 12/18	0	0	0	0	0	0		
12:15	0	3	0	1	0	4		
12:30	0	0	0	0	0	0		
12:45	0 *	3 6	0 *	1 2	0 *	4	8	
01:00	0	2	0	2	0	4		
01:15	0	3	0	2	0	5		
01:30	0	0	0	3	0	3		
01:45	0 *	4 9	0 *	5 12	0 *	9	21	
02:00	0	2	0	3	0	5		
02:15	0	3	0	6	0	9		
02:30	0	1	0	3	0	4		
02:45	0 *	1 7	0 *	1 13	0 *	2	20	
03:00	0	2	0	4	0	6		
03:15	0	1	0	0	0	1		
03:30	0	2	0	4	0	6		
03:45	0 *	0 5	0 *	5 13	0 *	5	18	
04:00	0	0	0	2	0	2		
04:15	0	1	0	2	0	3		
04:30	0	0	0	0	0	0		
04:45	0 *	1 2	0 *	2 6	0 *	3	8	
05:00	0	0	0	1	0	1		
05:15	0	0	0	2	0	2		
05:30	0	0	0	0	0	0		
05:45	0 *	0 *	0 *	3 6	0 *	3	6	
06:00	0	0	0	0	0	0		
06:15	0	1	0	0	0	1		
06:30	0	0	0	0	0	0		
06:45	0 *	0 1	0 *	0 *	0 *	0	1	
07:00	0	0	0	0	0	0		
07:15	0	0	0	0	0	0		
07:30	0	0	0	0	0	0		
07:45	0 *	0 *	0 *	0 *	0 *	0	*	
08:00	0	0	0	0	0	0		
08:15	0	0	0	0	0	0		
08:30	0	0	0	0	0	0		
08:45	0 *	0 *	0 *	0 *	0 *	0	*	
09:00	0	0	0	0	0	0		
09:15	0	0	0	0	0	0		
09:30	0	0	0	0	0	0		
09:45	0 *	0 *	0 *	0 *	0 *	0	*	
10:00	0	0	0	0	0	0		
10:15	0	0	0	0	0	0		
10:30	0	0	0	0	0	0		
10:45	0 *	0 *	0 *	0 *	0 *	0	*	
11:00	0	0	0	0	0	0		
11:15	0	0	0	0	0	0		
11:30	0	0	0	0	0	0		
11:45	0 *	0 *	0 *	0 *	0 *	0	*	
Totals	0	30	0	52	0	82		
Day Totals	30		52		82			
Split %	*	36.5%	*	63.4%				

Peak Hour	01:45	01:30	01:45
Volume	10	17	27
P.H.F.	.62	.70	.75

A-21

Weather :
Counted by:
Board # :
Other :

ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000269541
Start Date: 12/14/1999
File I.D. : 26954NS
Page : 6

Street name :DRIVEWAY AT VIRGINIA RD.N/O THE GATE Direction 1

Sunday

Begin Time	<------ NB A.M.		NB P.M.		------><------ SB A.M.		SB P.M.		------><------Combined A.M.		Combined P.M.	
12:00 12/19	0		0		0		0		0		0	
12:15	0		3		0		0		0		3	
12:30	0		2		0		0		0		2	
12:45	0	*	5	10	0	*	3	3	0	*	8	13
01:00	0		3		0		5		0		8	
01:15	0		4		0		3		0		7	
01:30	0		1		0		5		0		6	
01:45	0	*	1	9	0	*	1	14	0	*	2	23
02:00	0		1		0		1		0		2	
02:15	0		3		0		3		0		6	
02:30	0		2		0		6		0		8	
02:45	0	*	3	9	0	*	2	12	0	*	5	21
03:00	0		0		0		2		0		2	
03:15	0		0		0		4		0		4	
03:30	0		2		0		6		0		8	
03:45	0	*	2	4	0	*	4	16	0	*	6	20
04:00	0		0		0		1		0		1	
04:15	0		0		0		1		0		1	
04:30	0		2		0		4		0		6	
04:45	0	*	1	3	0	*	2	8	0	*	3	11
05:00	0		0		0		1		0		1	
05:15	0		0		0		1		0		1	
05:30	0		0		0		0		0		0	
05:45	0	*	0	*	0	*	0	2	0	*	0	2
06:00	0		0		0		0		0		0	
06:15	0		0		0		0		0		0	
06:30	0		0		0		0		0		0	
06:45	0	*	0	*	0	*	0	*	0	*	0	*
07:00	0		0		0		0		0		0	
07:15	0		0		0		0		0		0	
07:30	0		0		0		0		0		0	
07:45	0	*	0	*	0	*	0	*	0	*	0	*
08:00	0		0		0		0		0		0	
08:15	0		0		0		0		0		0	
08:30	0		0		0		0		0		0	
08:45	0	*	0	*	0	*	0	*	0	*	0	*
09:00	0		0		0		0		0		0	
09:15	0		0		0		0		0		0	
09:30	0		0		0		0		0		0	
09:45	0	*	0	*	0	*	0	*	0	*	0	*
10:00	0		0		0		0		0		0	
10:15	0		0		0		0		0		0	
10:30	0		0		0		0		0		0	
10:45	0	*	0	*	0	*	0	*	0	*	0	*
11:00	0		0		0		0		0		0	
11:15	0		0		0		0		0		0	
11:30	0		0		0		0		0		0	
11:45	0	*	0	*	0	*	0	*	0	*	0	*
Totals	0		35		0		55		0		90	
Day Totals		35				55				90		
Split %	*		38.8%		*		61.1%					
Peak Hour			12:30				12:45				12:45	
Volume			14				16				29	
P.H.F.			.7				.8				.90	

A-22

Weather :
Counted by:
Board # :
Other :

ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000269541
Start Date: 12/14/195
File I.D. : 26954NS
Page : 7

Street name :DRIVEWAY AT VIRGINIA RD.N/O THE GATE Direction 1

Begin	<------ NB		------><------ SB		------><------Combined		------> Monday			
Time	A.M.		P.M.		A.M.		P.M.		A.M.		P.M.	
12:00 12/20	0		0		0		0		0		0	
12:15	0		1		0		1		0		2	
12:30	0		0		0		0		0		0	
12:45	0	*	1	2	0	*	3	4	0	*	4	6
01:00	0		0		0		2		0		2	
01:15	0		2		0		2		0		4	
01:30	0		0		0		0		0		0	
01:45	0	*	0	2	0	*	0	4	0	*	0	6
02:00	0		0		0		1		0		1	
02:15	0		0		0		0		0		0	
02:30	0		1		0		3		0		4	
02:45	0	*	0	1	0	*	1	5	0	*	1	6
03:00	0		0		0		1		0		1	
03:15	0		0		0		1		0		1	
03:30	0		0		0		2		0		2	
03:45	0	*	0	*	0	*	1	5	0	*	1	5
04:00	0		0		0		1		0		1	
04:15	0		0		0		0		0		0	
04:30	0		0		0		1		0		1	
04:45	0	*	1	1	0	*	1	3	0	*	2	4
05:00	0		0		0		0		0		0	
05:15	0		1		0		2		0		3	
05:30	0		0		0		0		0		0	
05:45	1	1	0	1	0	*	1	3	1	1	1	4
06:00	0		0		0		1		0		1	
06:15	0		0		0		0		0		0	
06:30	0		0		0		0		0		0	
06:45	0	*	0	*	0	*	0	1	0	*	0	1
07:00	0		0		0		0		0		0	
07:15	0		0		0		0		0		0	
07:30	0		0		0		0		0		0	
07:45	0	*	0	*	0	*	0	*	0	*	0	*
08:00	0		0		0		0		0		0	
08:15	0		0		0		0		0		0	
08:30	0		0		0		0		0		0	
08:45	3	3	0	*	0	*	0	*	3	3	0	*
09:00	1		0		0		0		1		0	
09:15	1		0		1		0		2		0	
09:30	1		0		0		0		1		0	
09:45	0	3	0	*	1	2	0	*	1	5	0	*
10:00	0		0		0		0		0		0	
10:15	1		0		1		0		2		0	
10:30	0		0		0		0		0		0	
10:45	0	1	0	*	1	2	0	*	1	3	0	*
11:00	2		0		1		0		3		0	
11:15	2		0		1		0		3		0	
11:30	2		0		3		0		5		0	
11:45	0	6	0	*	2	7	0	*	2	13	0	*
Totals	14		7		11		25		25		32	
Day Totals		21				36				57		
Split %	56.0%		21.8%		44.0%		78.1%					
Peak Hour	08:45		12:30		11:00		12:30		11:00		12:30	
Volume	6		3		7		7		13		10	
P.H.F.	.5		.37		.58		.58		.65		.62	

A-23

ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000296511
Start Date: 12/14/1999
File I.D. : 26951C
Page : 1

Street name :VIRGINIA RD. N/O SAN ANTONIO DR. Direction 1

Begin Time	Int. Total	Motor cycle	Car w/ trailr	Pickup /Van	Bus	2 Axle 6 Tire	3 Axle Single	4 Axle Single	Class Eight	3 Axle w/ Trl	6/7 Ax Single	5 Axle Multi	6 Axle Multi	7 Axle Multi	No Class
12:00 12/14	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
01:00 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
02:00 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 am	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
04:45	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0
05:00 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
05:30	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0
05:45	6	0	6	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	12	0	12	0	0	0	0	0	0	0	0	0	0	0	0
06:00 am	5	0	4	1	0	0	0	0	0	0	0	0	0	0	0
06:15	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
06:30	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
06:45	5	0	3	1	0	1	0	0	0	0	0	0	0	0	0
Hour Total	13	0	10	2	0	1	0	0	0	0	0	0	0	0	0
07:00 am	9	0	8	1	0	0	0	0	0	0	0	0	0	0	0
07:15	16	0	14	1	0	1	0	0	0	0	0	0	0	0	0
07:30	8	0	4	3	0	0	0	0	0	0	0	0	0	0	1
07:45	11	0	7	3	0	0	0	0	0	0	0	0	0	0	1
Hour Total	44	0	33	8	0	1	0	0	0	0	0	0	0	0	2
08:00 am	7	0	6	1	0	0	0	0	0	0	0	0	0	0	0
08:15	6	0	6	0	0	0	0	0	0	0	0	0	0	0	0
08:30	14	0	10	2	0	0	1	0	1	0	0	0	0	0	0
08:45	11	0	8	1	0	1	0	0	0	0	0	0	0	0	1
Hour Total	38	0	30	4	0	1	1	0	1	0	0	0	0	0	1

ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000296511
Start Date: 12/14/195
File I.D. : 26951C
Page : 2

Street name :VIRGINIA RD. N/O SAN ANTONIO DR. Direction 1

Begin Time	Int. Total	Motor cycle	Car w/ trailr	Pickup /Van	Bus	2 Axle 6 Tire	3 Axle Single	4 Axle Single	Class Eight	3 Axle w/ Trl	6/7 Ax Single	5 Axle Multi	6 Axle Multi	7 Axle Multi	No Class
09:00 am	7	0	6	1	0	0	0	0	0	0	0	0	0	0	0
09:15	10	0	8	0	0	0	0	1	0	0	0	0	0	0	1
09:30	9	1	7	0	0	0	0	0	0	0	0	0	0	0	1
09:45	9	0	5	2	0	1	0	0	0	0	0	0	0	0	1
Hour Total	35	1	26	3	0	1	0	1	0	0	0	0	0	0	3
10:00 am	8	0	7	0	0	0	0	0	0	0	0	0	0	0	1
10:15	13	0	12	0	0	1	0	0	0	0	0	0	0	0	0
10:30	10	0	9	1	0	0	0	0	0	0	0	0	0	0	0
10:45	12	0	11	1	0	0	0	0	0	0	0	0	0	0	0
Hour Total	43	0	39	2	0	1	0	0	0	0	0	0	0	0	1
11:00 am	13	0	12	0	0	0	0	0	0	0	0	0	0	0	1
11:15	19	0	17	1	0	0	0	0	1	0	0	0	0	0	0
11:30	14	0	11	2	0	0	0	0	0	0	0	0	0	0	1
11:45	16	0	15	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	62	0	55	3	0	0	0	0	1	0	0	0	0	0	3
12:00 pm	18	0	14	3	0	0	0	0	0	0	0	0	0	0	1
12:15	13	0	11	2	0	0	0	0	0	0	0	0	0	0	0
12:30	16	0	13	1	0	0	0	0	0	0	0	0	0	0	2
12:45	8	0	6	0	0	0	0	0	0	0	0	0	0	0	2
Hour Total	55	0	44	6	0	0	0	0	0	0	0	0	0	0	5
01:00 pm	19	0	17	1	0	0	0	0	0	0	0	0	0	0	1
01:15	13	0	12	1	0	0	0	0	0	0	0	0	0	0	0
01:30	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0
01:45	18	0	18	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	55	0	52	2	0	0	0	0	0	0	0	0	0	0	1
02:00 pm	12	2	4	4	0	1	0	0	0	0	0	0	0	0	1
02:15	8	1	3	4	0	0	0	0	0	0	0	0	0	0	0
02:30	12	0	8	3	0	1	0	0	0	0	0	0	0	0	0
02:45	12	1	4	7	0	0	0	0	0	0	0	0	0	0	0
Hour Total	44	4	19	18	0	2	0	0	0	0	0	0	0	0	1
03:00 pm	14	1	10	2	0	0	0	0	0	0	0	0	0	0	1
03:15	83	2	74	6	0	1	0	0	0	0	0	0	0	0	0
03:30	12	2	5	5	0	0	0	0	0	0	0	0	0	0	0
03:45	10	1	3	3	0	3	0	0	0	0	0	0	0	0	0
Hour Total	119	6	92	16	0	4	0	0	0	0	0	0	0	0	1
04:00 pm	9	1	6	2	0	0	0	0	0	0	0	0	0	0	0
04:15	7	1	2	2	0	1	0	0	0	0	0	0	0	0	1
04:30	5	2	2	1	0	0	0	0	0	0	0	0	0	0	0
04:45	12	0	11	1	0	0	0	0	0	0	0	0	0	0	0
Hour Total	33	4	21	6	0	1	0	0	0	0	0	0	0	0	1
05:00 pm	8	1	4	1	0	2	0	0	0	0	0	0	0	0	0
05:15	8	1	4	3	0	0	0	0	0	0	0	0	0	0	0
05:30	13	0	10	2	0	1	0	0	0	0	0	0	0	0	0
05:45	8	0	4	3	0	0	0	0	0	0	0	0	0	0	1
Hour Total	37	2	22	9	0	3	0	0	0	0	0	0	0	0	1

ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000296511
Start Date: 12/14/1999
File I.D. : 26951C
Page : 3

Street name :VIRGINIA RD. N/O SAN ANTONIO DR. Direction 1

Begin Time	Int. Total	Motor cycle	Car w/ trailr	Pickup /Van	Bus	2 Axle 6 Tire	3 Axle Single	4 Axle Single	Class Eight	3 Axle w/ Trl	6/7 Ax Single	5 Axle Multi	6 Axle Multi	7 Axle Multi	No Class
06:00 pm	8	1	4	3	0	0	0	0	0	0	0	0	0	0	0
06:15	11	2	6	2	0	1	0	0	0	0	0	0	0	0	0
06:30	3	0	2	1	0	0	0	0	0	0	0	0	0	0	0
06:45	8	2	6	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	30	5	18	6	0	1	0	0	0	0	0	0	0	0	0
07:00 pm	11	1	6	2	0	2	0	0	0	0	0	0	0	0	0
07:15	3	0	1	0	0	2	0	0	0	0	0	0	0	0	0
07:30	6	1	3	1	0	0	1	0	0	0	0	0	0	0	0
07:45	8	1	5	1	0	1	0	0	0	0	0	0	0	0	0
Hour Total	28	3	15	4	0	5	1	0	0	0	0	0	0	0	0
08:00 pm	11	0	10	0	0	1	0	0	0	0	0	0	0	0	0
08:15	13	1	8	4	0	0	0	0	0	0	0	0	0	0	0
08:30	6	0	5	1	0	0	0	0	0	0	0	0	0	0	0
08:45	8	0	6	1	0	1	0	0	0	0	0	0	0	0	0
Hour Total	38	1	29	6	0	2	0	0	0	0	0	0	0	0	0
09:00 pm	6	0	2	4	0	0	0	0	0	0	0	0	0	0	0
09:15	4	0	2	2	0	0	0	0	0	0	0	0	0	0	0
09:30	3	1	1	1	0	0	0	0	0	0	0	0	0	0	0
09:45	5	0	4	1	0	0	0	0	0	0	0	0	0	0	0
Hour Total	18	1	9	8	0	0	0	0	0	0	0	0	0	0	0
10:00 pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	3	0	2	1	0	0	0	0	0	0	0	0	0	0	0
Hour Total	5	0	3	2	0	0	0	0	0	0	0	0	0	0	0
11:00 pm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	3	0	2	1	0	0	0	0	0	0	0	0	0	0	0
11:30	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
11:45	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	5	1	2	2	0	0	0	0	0	0	0	0	0	0	0
Day Totals	721	28	537	107	*	23	2	1	2	*	*	*	*	*	21	*
12:00 12/15	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	
12:15	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hour Total	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	
01:00 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hour Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
02:00 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hour Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

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ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000296511
Start Date: 12/14/19
File I.D. : 26951C

Street name :VIRGINIA RD. N/O SAN ANTONIO DR. Direction 1 Page : 4

Begin Time	Int. Total	Motor cycle	Car w/ trailr	Pickup /Van	Bus	2 Axle 6 Tire	3 Axle Single	4 Axle Single	Class Eight	3 Axle w/ Trl	6/7 Ax Single	5 Axle Multi	6 Axle Multi	7 Axle Multi	No Class
03:00 am	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Hour Total	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0
04:00 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
05:00 am	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
05:15	3	0	2	1	0	0	0	0	0	0	0	0	0	0	0
05:30	7	1	3	2	0	1	0	0	0	0	0	0	0	0	0
05:45	3	0	2	1	0	0	0	0	0	0	0	0	0	0	0
Hour Total	14	1	8	4	0	1	0	0	0	0	0	0	0	0	0
06:00 am	6	1	2	2	0	1	0	0	0	0	0	0	0	0	0
06:15	8	1	3	3	1	0	0	0	0	0	0	0	0	0	0
06:30	21	4	9	6	0	1	1	0	0	0	0	0	0	0	0
06:45	13	0	4	7	0	2	0	0	0	0	0	0	0	0	0
Hour Total	48	6	18	18	1	4	1	0	0	0	0	0	0	0	0
07:00 am	7	0	4	2	0	1	0	0	0	0	0	0	0	0	0
07:15	8	0	4	2	1	1	0	0	0	0	0	0	0	0	0
07:30	6	0	3	2	0	1	0	0	0	0	0	0	0	0	0
07:45	13	1	7	4	0	1	0	0	0	0	0	0	0	0	0
Hour Total	34	1	18	10	1	4	0	0	0	0	0	0	0	0	0
08:00 am	7	0	6	0	0	0	0	1	0	0	0	0	0	0	0
08:15	6	0	3	1	0	1	0	0	0	0	0	0	0	0	1
08:30	15	2	2	8	0	2	0	0	0	0	0	0	0	0	1
08:45	15	1	6	6	0	0	0	0	0	0	0	0	0	0	2
Hour Total	43	3	17	15	0	3	0	1	0	0	0	0	0	0	4
09:00 am	18	2	5	6	0	3	0	0	0	0	0	0	0	0	2
09:15	12	0	4	5	0	2	0	0	0	0	0	0	0	0	1
09:30	9	1	6	2	0	0	0	0	0	0	0	0	0	0	0
09:45	19	1	9	4	0	3	0	0	0	0	0	0	0	0	2
Hour Total	58	4	24	17	0	8	0	0	0	0	0	0	0	0	5
10:00 am	16	1	7	6	0	2	0	0	0	0	0	0	0	0	0
10:15	15	2	8	1	0	3	0	0	0	0	0	0	0	0	1
10:30	20	1	11	7	0	0	0	0	0	0	0	0	0	0	1
10:45	18	2	11	4	0	0	0	0	0	0	0	0	0	0	1
Hour Total	69	6	37	18	0	5	0	0	0	0	0	0	0	0	3
11:00 am	18	0	15	0	1	0	0	0	1	0	0	0	0	0	1
11:15	14	0	13	1	0	0	0	0	0	0	0	0	0	0	0
11:30	23	0	20	2	0	0	0	0	0	0	0	0	0	0	1
11:45	20	0	11	1	0	0	0	0	0	0	0	0	0	0	8
Hour Total	75	0	59	4	1	0	0	0	1	0	0	0	0	0	10

ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000296511
Start Date: 12/14/1999
File I.D. : 26951C
Page : 5

Street name :VIRGINIA RD. N/O SAN ANTONIO DR. Direction 1

Begin Time	Int. Total	Motor cycle	Car w/ trailr	Pickup /Van	Bus	2 Axle 6 Tire	3 Axle Single	4 Axle Single	Class Eight	3 Axle w/ Trl	6/7 Ax Single	5 Axle Multi	6 Axle Multi	7 Axle Multi	No Class
12:00 pm	13	0	10	1	0	0	0	0	0	0	0	0	0	0	2
12:15	17	0	10	0	0	0	0	0	0	0	0	0	0	0	7
12:30	16	0	14	0	0	0	0	1	0	0	0	0	0	0	1
12:45	19	1	14	1	0	0	0	0	0	0	0	0	0	0	3
Hour Total	65	1	48	2	0	0	0	1	0	0	0	0	0	0	13
01:00 pm	7	0	6	1	0	0	0	0	0	0	0	0	0	0	0
01:15	8	0	4	4	0	0	0	0	0	0	0	0	0	0	0
01:30	15	0	13	1	0	0	0	0	0	0	0	0	0	0	1
01:45	9	0	8	1	0	0	0	0	0	0	0	0	0	0	0
Hour Total	39	0	31	7	0	0	0	0	0	0	0	0	0	0	1
02:00 pm	12	0	9	3	0	0	0	0	0	0	0	0	0	0	0
02:15	14	0	10	2	0	1	0	0	0	0	0	0	0	0	1
02:30	13	0	12	0	0	0	1	0	0	0	0	0	0	0	0
02:45	16	0	12	3	0	0	0	0	0	0	0	0	0	0	1
Hour Total	55	0	43	8	0	1	1	0	0	0	0	0	0	0	2
03:00 pm	9	1	4	3	0	0	0	0	0	0	0	0	0	0	1
03:15	11	0	9	2	0	0	0	0	0	0	0	0	0	0	0
03:30	15	0	14	1	0	0	0	0	0	0	0	0	0	0	0
03:45	14	0	14	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	49	1	41	6	0	0	0	0	0	0	0	0	0	0	1
04:00 pm	14	0	12	0	0	1	0	0	0	0	0	0	0	0	1
04:15	15	0	12	3	0	0	0	0	0	0	0	0	0	0	0
04:30	13	0	13	0	0	0	0	0	0	0	0	0	0	0	0
04:45	11	0	8	2	0	0	0	0	0	0	0	0	0	0	1
Hour Total	53	0	45	5	0	1	0	0	0	0	0	0	0	0	2
05:00 pm	7	0	5	2	0	0	0	0	0	0	0	0	0	0	0
05:15	12	0	12	0	0	0	0	0	0	0	0	0	0	0	0
05:30	14	0	13	1	0	0	0	0	0	0	0	0	0	0	0
05:45	8	0	8	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	41	0	38	3	0	0	0	0	0	0	0	0	0	0	0
06:00 pm	11	0	10	1	0	0	0	0	0	0	0	0	0	0	0
06:15	19	0	18	1	0	0	0	0	0	0	0	0	0	0	0
06:30	10	0	10	0	0	0	0	0	0	0	0	0	0	0	0
06:45	9	0	9	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	49	0	47	2	0	0	0	0	0	0	0	0	0	0	0
07:00 pm	8	0	6	2	0	0	0	0	0	0	0	0	0	0	0
07:15	10	0	10	0	0	0	0	0	0	0	0	0	0	0	0
07:30	11	0	10	0	0	0	1	0	0	0	0	0	0	0	0
07:45	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	34	0	31	2	0	0	1	0	0	0	0	0	0	0	0
08:00 pm	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0
08:15	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0
08:30	4	0	3	1	0	0	0	0	0	0	0	0	0	0	0
08:45	8	0	8	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	20	0	19	1	0	0	0	0	0	0	0	0	0	0	0

ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000296511
Start Date: 12/14/19
File I.D. : 26951C

Street name :VIRGINIA RD. N/O SAN ANTONIO DR. Direction 1 Page : 6

Begin Time	Int. Total	Motor cycle	Car w/ trailr	Pickup /Van	Bus	2 Axle 6 Tire	3 Axle Single	4 Axle Single	Class Eight	3 Axle w/ Trl	6/7 Ax Single	5 Axle Multi	6 Axle Multi	7 Axle Multi	No Class	
09:00 pm	6	0	6	0	0	0	0	0	0	0	0	0	0	0	0	
09:15	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	
09:30	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
09:45	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	
Hour Total	12	0	12	0	0	0	0	0	0	0	0	0	0	0	0	
10:00 pm	4	0	3	1	0	0	0	0	0	0	0	0	0	0	0	
10:15	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	
10:30	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	
10:45	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
Hour Total	12	0	11	1	0	0	0	0	0	0	0	0	0	0	0	
11:00 pm	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	
11:15	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	
11:30	3	0	2	1	0	0	0	0	0	0	0	0	0	0	0	
11:45	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	
Hour Total	9	0	7	2	0	0	0	0	0	0	0	0	0	0	0	
Day Totals	784	24	556	127	3	27	3	2	1	*	*	*	*	*	41	*
12:00 12/16	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	
12:15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hour Total	3	0	2	0	0	0	0	0	0	0	0	0	0	0	1	
01:00 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
01:30	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hour Total	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
02:00 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
02:15	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
02:45	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
Hour Total	2	0	1	0	0	0	0	0	0	0	0	0	0	0	1	
03:00 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
03:15	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Hour Total	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
04:00 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
04:45	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
Hour Total	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
05:00 am	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	
05:15	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	
05:30	6	0	6	0	0	0	0	0	0	0	0	0	0	0	0	
05:45	8	0	6	2	0	0	0	0	0	0	0	0	0	0	0	
Hour Total	18	0	15	3	0	0	0	0	0	0	0	0	0	0	0	

ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000296511
Start Date: 12/14/1999
File I.D. : 26951C
Page : 7

Street name :VIRGINIA RD. N/O SAN ANTONIO DR. Direction 1

Begin Time	Int. Total	Motor cycle	Car w/ trailr	Pickup /Van	Bus	2 Axle 6 Tire	3 Axle Single	4 Axle Single	Class Eight	3 Axle w/ Trl	6/7 Ax Single	5 Axle Multi	6 Axle Multi	7 Axle Multi	No Class
06:00 am	7	0	5	2	0	0	0	0	0	0	0	0	0	0	0
06:15	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
06:30	4	0	3	0	0	0	1	0	0	0	0	0	0	0	0
06:45	8	0	7	1	0	0	0	0	0	0	0	0	0	0	0
Hour Total	20	0	16	3	0	0	1	0	0	0	0	0	0	0	0
07:00 am	20	0	14	4	0	0	0	0	0	0	0	0	0	0	2
07:15	41	0	35	3	0	0	0	0	0	0	0	0	0	0	3
07:30	17	0	16	1	0	0	0	0	0	0	0	0	0	0	0
07:45	12	0	12	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	90	0	77	8	0	0	0	0	0	0	0	0	0	0	5
08:00 am	11	0	9	1	0	0	0	0	1	0	0	0	0	0	0
08:15	8	0	5	2	0	0	0	0	0	0	0	0	0	0	1
08:30	10	0	8	0	0	2	0	0	0	0	0	0	0	0	0
08:45	17	0	11	3	0	3	0	0	0	0	0	0	0	0	0
Hour Total	46	0	33	6	0	5	0	0	1	0	0	0	0	0	1
09:00 am	10	0	8	1	0	1	0	0	0	0	0	0	0	0	0
09:15	11	0	9	1	0	0	0	0	0	0	0	0	0	0	1
09:30	8	0	7	1	0	0	0	0	0	0	0	0	0	0	0
09:45	12	0	9	0	0	1	0	0	0	0	0	0	0	0	2
Hour Total	41	0	33	3	0	2	0	0	0	0	0	0	0	0	3
10:00 am	11	0	7	2	0	0	0	0	0	0	0	0	0	0	2
10:15	7	0	6	1	0	0	0	0	0	0	0	0	0	0	0
10:30	14	0	14	0	0	0	0	0	0	0	0	0	0	0	0
10:45	15	0	12	2	0	1	0	0	0	0	0	0	0	0	0
Hour Total	47	0	39	5	0	1	0	0	0	0	0	0	0	0	2
11:00 am	20	0	16	4	0	0	0	0	0	0	0	0	0	0	0
11:15	24	0	17	5	0	0	0	0	0	0	0	0	0	0	2
11:30	26	0	23	3	0	0	0	0	0	0	0	0	0	0	0
11:45	35	0	29	3	0	0	0	0	1	0	0	0	0	0	2
Hour Total	105	0	85	15	0	0	0	0	1	0	0	0	0	0	4
12:00 pm	18	0	16	2	0	0	0	0	0	0	0	0	0	0	0
12:15	18	0	14	2	0	0	0	0	0	0	0	0	0	0	2
12:30	15	0	9	4	0	1	0	0	0	0	0	0	0	0	1
12:45	7	0	7	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	58	0	46	8	0	1	0	0	0	0	0	0	0	0	3
01:00 pm	15	0	14	0	0	0	0	0	0	0	0	0	0	0	1
01:15	10	0	9	1	0	0	0	0	0	0	0	0	0	0	0
01:30	14	0	12	1	0	0	0	0	0	0	0	0	0	0	1
01:45	17	0	15	1	0	0	0	0	0	0	0	0	0	0	1
Hour Total	56	0	50	3	0	0	0	0	0	0	0	0	0	0	3
02:00 pm	12	0	7	2	0	0	0	0	0	0	0	0	0	0	3
02:15	8	0	8	0	0	0	0	0	0	0	0	0	0	0	0
02:30	9	0	6	3	0	0	0	0	0	0	0	0	0	0	0
02:45	17	0	11	5	0	0	0	0	0	0	0	0	0	0	1
Hour Total	46	0	32	10	0	0	0	0	0	0	0	0	0	0	4

ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000296511
Start Date: 12/14/19
File I.D. : 26951C
Page : 8

Street name :VIRGINIA RD. N/O SAN ANTONIO DR. Direction 1

Begin Time	Int. Total	Motor cycle	Car w/ trailr	Pickup /Van	2 Axle Bus	3 Axle 6 Tire	3 Axle Single	4 Axle Single	Class 3 Axle Eight	3 Axle w/ Trl	6/7 Ax Single	5 Axle Multi	6 Axle Multi	7 Axle Multi	No Class
03:00 pm	11	0	7	2	0	0	0	0	0	0	0	0	0	0	2
03:15	10	0	7	2	0	0	0	0	0	0	0	0	0	0	1
03:30	11	0	10	1	0	0	0	0	0	0	0	0	0	0	0
03:45	10	0	8	2	0	0	0	0	0	0	0	0	0	0	0
Hour Total	42	0	32	7	0	0	0	0	0	0	0	0	0	0	3
04:00 pm	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0
04:15	12	0	9	2	0	0	1	0	0	0	0	0	0	0	0
04:30	10	0	9	1	0	0	0	0	0	0	0	0	0	0	0
04:45	13	0	13	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	39	0	35	3	0	0	1	0	0	0	0	0	0	0	0
05:00 pm	14	0	11	3	0	0	0	0	0	0	0	0	0	0	0
05:15	22	0	20	2	0	0	0	0	0	0	0	0	0	0	0
05:30	17	0	15	1	0	0	0	0	0	0	0	0	0	0	1
05:45	12	0	11	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	65	0	57	6	0	0	0	0	0	0	0	0	0	0	2
06:00 pm	12	0	8	4	0	0	0	0	0	0	0	0	0	0	0
06:15	13	0	13	0	0	0	0	0	0	0	0	0	0	0	0
06:30	14	0	11	1	0	0	0	1	0	0	0	0	0	0	1
06:45	24	0	16	3	0	1	0	0	0	0	0	0	0	0	4
Hour Total	63	0	48	8	0	1	0	1	0	0	0	0	0	0	5
07:00 pm	13	0	13	0	0	0	0	0	0	0	0	0	0	0	0
07:15	10	0	8	2	0	0	0	0	0	0	0	0	0	0	0
07:30	10	0	6	3	0	0	0	0	0	0	0	0	0	0	1
07:45	7	0	7	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	40	0	34	5	0	0	0	0	0	0	0	0	0	0	1
08:00 pm	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
08:15	6	0	6	0	0	0	0	0	0	0	0	0	0	0	0
08:30	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
08:45	14	0	14	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	23	0	22	1	0	0	0	0	0	0	0	0	0	0	0
09:00 pm	8	0	6	2	0	0	0	0	0	0	0	0	0	0	0
09:15	5	0	4	0	0	0	0	0	0	0	0	0	0	0	1
09:30	5	0	4	0	0	1	0	0	0	0	0	0	0	0	0
09:45	7	0	7	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	25	0	21	2	0	1	0	0	0	0	0	0	0	0	1
10:00 pm	4	0	3	1	0	0	0	0	0	0	0	0	0	0	0
10:15	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
10:30	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
10:45	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0
Hour Total	9	0	7	2	0	0	0	0	0	0	0	0	0	0	0
11:00 pm	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
11:15	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
11:30	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
11:45	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	4	0	3	1	0	0	0	0	0	0	0	0	0	0	0
Day Totals	845	*	691	99	*	11	2	1	2	*	*	*	*	*	39	*

ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000296511
Start Date: 12/14/1999
File I.D. : 26951C
Page : 9

Street name :VIRGINIA RD. N/O SAN ANTONIO DR. Direction 1

Begin Time	Int. Total	Motor cycle	Car w/ trailr	Pickup /Van	2 Axle 6 Tire	3 Axle Single	4 Axle Single	Class Eight	3 Axle w/ Trl	6/7 Ax Single	5 Axle Multi	6 Axle Multi	7 Axle Multi	No Class
12:00 12/17	1	0	1	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	1	0	1	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	2	0	2	0	0	0	0	0	0	0	0	0	0	0
01:00 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 am	1	0	1	0	0	0	0	0	0	0	0	0	0	0
02:15	1	0	1	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	2	0	2	0	0	0	0	0	0	0	0	0	0	0
03:00 am	1	0	1	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	1	0	1	0	0	0	0	0	0	0	0	0	0	0
04:00 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	1	0	1	0	0	0	0	0	0	0	0	0	0	0
Hour Total	1	0	1	0	0	0	0	0	0	0	0	0	0	0
05:00 am	1	0	1	0	0	0	0	0	0	0	0	0	0	0
05:15	5	0	4	1	0	0	0	0	0	0	0	0	0	0
05:30	4	0	4	0	0	0	0	0	0	0	0	0	0	0
05:45	4	0	4	0	0	0	0	0	0	0	0	0	0	0
Hour Total	14	0	13	1	0	0	0	0	0	0	0	0	0	0
06:00 am	6	0	5	0	0	1	0	0	0	0	0	0	0	0
06:15	5	0	5	0	0	0	0	0	0	0	0	0	0	0
06:30	4	0	3	1	0	0	0	0	0	0	0	0	0	0
06:45	2	0	1	0	0	0	0	1	0	0	0	0	0	0
Hour Total	17	0	14	1	0	1	0	1	0	0	0	0	0	0
07:00 am	12	0	8	4	0	0	0	0	0	0	0	0	0	0
07:15	6	0	5	1	0	0	0	0	0	0	0	0	0	0
07:30	15	0	10	5	0	0	0	0	0	0	0	0	0	0
07:45	12	0	11	0	0	0	1	0	0	0	0	0	0	0
Hour Total	45	0	34	10	0	0	1	0	0	0	0	0	0	0
08:00 am	19	0	14	4	0	1	0	0	0	0	0	0	0	0
08:15	12	0	9	3	0	0	0	0	0	0	0	0	0	0
08:30	17	1	12	4	0	0	0	0	0	0	0	0	0	0
08:45	12	0	9	3	0	0	0	0	0	0	0	0	0	0
Hour Total	60	1	44	14	0	1	0	0	0	0	0	0	0	0

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ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 00000029654[illegible]
Start Date: 12/14/19[illegible]
File I.D. : 26951C
Page : 10

Street name :VIRGINIA RD. N/O SAN ANTONIO DR. Direction 1

Begin Time	Int. Total	Motor cycle	Car w/ trailr	Pickup /Van	Bus	2 Axle 6 Tire	3 Axle Single	4 Axle Single	Class Eight	3 Axle 6/7 Ax w/ Trl	Single	5 Axle Multi	6 Axle Multi	7 Axle Multi	No Class
09:00 am	11	0	8	2	0	1	0	0	0	0	0	0	0	0	0
09:15	11	0	9	1	0	0	0	0	0	0	0	0	0	0	1
09:30	19	0	8	10	0	1	0	0	0	0	0	0	0	0	0
09:45	16	0	12	4	0	0	0	0	0	0	0	0	0	0	0
Hour Total	57	0	37	17	0	2	0	0	0	0	0	0	0	0	1
10:00 am	24	0	20	3	0	1	0	0	0	0	0	0	0	0	0
10:15	13	0	9	3	0	1	0	0	0	0	0	0	0	0	0
10:30	15	0	13	1	0	0	0	0	0	0	0	0	0	0	1
10:45	22	0	17	4	0	0	0	0	0	0	0	0	0	0	1
Hour Total	74	0	59	11	0	2	0	0	0	0	0	0	0	0	2
11:00 am	19	0	16	3	0	0	0	0	0	0	0	0	0	0	0
11:15	18	0	16	2	0	0	0	0	0	0	0	0	0	0	0
11:30	22	0	14	8	0	0	0	0	0	0	0	0	0	0	0
11:45	10	0	7	3	0	0	0	0	0	0	0	0	0	0	0
Hour Total	69	0	53	16	0	0	0	0	0	0	0	0	0	0	0
12:00 pm	18	0	13	5	0	0	0	0	0	0	0	0	0	0	0
12:15	20	0	13	6	0	0	0	0	0	0	0	0	0	0	1
12:30	10	0	5	4	0	0	0	0	0	0	0	0	0	0	1
12:45	10	0	10	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	58	0	41	15	0	0	0	0	0	0	0	0	0	0	2
01:00 pm	21	0	14	5	0	1	0	0	0	0	0	0	0	0	1
01:15	11	0	6	2	0	1	1	0	0	0	0	0	0	0	1
01:30	8	0	8	0	0	0	0	0	0	0	0	0	0	0	0
01:45	16	0	16	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	56	0	44	7	0	2	1	0	0	0	0	0	0	0	2
02:00 pm	11	0	7	2	0	0	1	0	0	0	0	0	0	0	1
02:15	12	0	10	1	0	0	0	0	0	0	0	0	0	0	1
02:30	9	0	9	0	0	0	0	0	0	0	0	0	0	0	0
02:45	15	0	8	4	0	0	0	1	1	0	0	0	0	0	1
Hour Total	47	0	34	7	0	0	1	1	1	0	0	0	0	0	3
03:00 pm	12	0	7	4	0	0	0	0	0	0	0	0	0	0	1
03:15	9	0	9	0	0	0	0	0	0	0	0	0	0	0	0
03:30	15	0	12	3	0	0	0	0	0	0	0	0	0	0	0
03:45	15	0	12	2	0	0	0	0	0	0	0	0	0	0	1
Hour Total	51	0	40	9	0	0	0	0	0	0	0	0	0	0	2
04:00 pm	19	0	15	2	0	1	0	0	0	0	0	0	0	0	1
04:15	8	0	7	0	0	0	1	0	0	0	0	0	0	0	0
04:30	16	0	14	2	0	0	0	0	0	0	0	0	0	0	0
04:45	16	0	12	2	0	1	0	0	0	0	0	0	0	0	1
Hour Total	59	0	48	6	0	2	1	0	0	0	0	0	0	0	2
05:00 pm	14	0	11	2	0	0	0	0	0	0	0	0	0	0	1
05:15	13	0	9	2	0	1	0	0	0	0	0	0	0	0	1
05:30	9	0	7	2	0	0	0	0	0	0	0	0	0	0	0
05:45	6	0	5	1	0	0	0	0	0	0	0	0	0	0	0
Hour Total	42	0	32	7	0	1	0	0	0	0	0	0	0	0	2

ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000296511
Start Date: 12/14/1999
File I.D. : 26951C
Page : 11

Street name :VIRGINIA RD. N/O SAN ANTONIO DR. Direction 1

Begin Time	Int. Total	Motor cycle	Car w/ trailr	Pickup /Van	Bus	2 Axle 6 Tire	3 Axle Single	4 Axle Single	Class Eight	3 Axle w/ Trl	6/7 Ax Single	5 Axle Multi	6 Axle Multi	7 Axle Multi	No Class
06:00 pm	14	0	10	3	0	0	1	0	0	0	0	0	0	0	0
06:15	11	0	8	2	0	0	0	0	0	0	0	0	0	0	1
06:30	17	0	15	2	0	0	0	0	0	0	0	0	0	0	0
06:45	15	0	13	1	0	0	0	0	0	0	0	0	0	0	1
Hour Total	57	0	46	8	0	0	1	0	0	0	0	0	0	0	2
07:00 pm	10	1	8	0	0	1	0	0	0	0	0	0	0	0	0
07:15	15	0	11	3	0	0	0	0	0	0	0	0	0	0	1
07:30	11	0	7	3	0	0	0	0	0	0	0	0	0	0	1
07:45	11	0	10	1	0	0	0	0	0	0	0	0	0	0	0
Hour Total	47	1	36	7	0	1	0	0	0	0	0	0	0	0	2
08:00 pm	5	0	4	1	0	0	0	0	0	0	0	0	0	0	0
08:15	6	0	4	1	0	1	0	0	0	0	0	0	0	0	0
08:30	11	0	7	4	0	0	0	0	0	0	0	0	0	0	0
08:45	7	0	6	1	0	0	0	0	0	0	0	0	0	0	0
Hour Total	29	0	21	7	0	1	0	0	0	0	0	0	0	0	0
09:00 pm	7	0	6	0	0	0	0	0	0	0	0	0	0	0	1
09:15	5	0	4	1	0	0	0	0	0	0	0	0	0	0	0
09:30	8	0	8	0	0	0	0	0	0	0	0	0	0	0	0
09:45	4	0	3	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	24	0	21	1	0	0	0	0	0	0	0	0	0	0	2
10:00 pm	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
10:15	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	8	0	8	0	0	0	0	0	0	0	0	0	0	0	0
11:00 pm	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0
11:15	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0
11:30	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
11:45	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0
Hour Total	11	0	9	2	0	0	0	0	0	0	0	0	0	0	0
Day Totals	831	2	640	146	*	13	5	2	1	*	*	*	*	*	22	*
12:00 12/18	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
12:45	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0
01:00 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0

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ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000296511
Start Date: 12/14/19
File I.D. : 26951C
Page : 12

Street name :VIRGINIA RD. N/O SAN ANTONIO DR. Direction 1

Begin Time	Int. Total	Motor cycle	Car w/ trailr	Pickup /Van	Bus	2 Axle 6 Tire	3 Axle Single	4 Axle Single	Class Eight	3 Axle w/ Trl	6/7 Ax Single	5 Axle Multi	6 Axle Multi	7 Axle Multi	No Class
03:00 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
04:00 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
04:30	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
04:45	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0
05:00 am	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
05:15	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0
05:30	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0
05:45	6	0	5	1	0	0	0	0	0	0	0	0	0	0	0
Hour Total	14	0	12	2	0	0	0	0	0	0	0	0	0	0	0
06:00 am	7	0	7	0	0	0	0	0	0	0	0	0	0	0	0
06:15	6	0	6	0	0	0	0	0	0	0	0	0	0	0	0
06:30	8	0	7	1	0	0	0	0	0	0	0	0	0	0	0
06:45	9	0	7	1	0	0	0	0	0	0	0	0	0	0	1
Hour Total	30	0	27	2	0	0	0	0	0	0	0	0	0	0	1
07:00 am	11	0	9	2	0	0	0	0	0	0	0	0	0	0	0
07:15	8	0	5	3	0	0	0	0	0	0	0	0	0	0	0
07:30	8	0	6	1	0	0	1	0	0	0	0	0	0	0	0
07:45	14	0	9	5	0	0	0	0	0	0	0	0	0	0	0
Hour Total	41	0	29	11	0	0	1	0	0	0	0	0	0	0	0
08:00 am	9	0	8	1	0	0	0	0	0	0	0	0	0	0	0
08:15	9	0	7	1	0	0	0	0	0	0	0	0	0	0	1
08:30	9	0	9	0	0	0	0	0	0	0	0	0	0	0	0
08:45	15	0	13	2	0	0	0	0	0	0	0	0	0	0	0
Hour Total	42	0	37	4	0	0	0	0	0	0	0	0	0	0	1
09:00 am	14	0	9	5	0	0	0	0	0	0	0	0	0	0	0
09:15	14	0	9	3	0	1	0	0	0	0	0	0	0	0	1
09:30	9	0	5	2	0	0	0	0	0	0	0	0	0	0	2
09:45	8	0	7	1	0	0	0	0	0	0	0	0	0	0	0
Hour Total	45	0	30	11	0	1	0	0	0	0	0	0	0	0	3
10:00 am	7	0	7	0	0	0	0	0	0	0	0	0	0	0	0
10:15	12	0	8	4	0	0	0	0	0	0	0	0	0	0	0
10:30	13	0	10	2	0	0	0	0	0	0	0	0	0	0	1
10:45	16	0	11	4	0	0	0	0	0	0	0	0	0	0	1
Hour Total	48	0	36	10	0	0	0	0	0	0	0	0	0	0	2
11:00 am	10	0	6	3	0	0	0	0	0	0	0	0	0	0	1
11:15	15	0	11	2	0	1	0	0	0	0	0	0	0	0	1
11:30	11	0	11	0	0	0	0	0	0	0	0	0	0	0	0
11:45	13	0	10	2	0	0	0	0	1	0	0	0	0	0	0
Hour Total	49	0	38	7	0	1	0	0	1	0	0	0	0	0	2

ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000296511
Start Date: 12/14/1999
File I.D. : 26951C
Page : 13

Street name :VIRGINIA RD. N/O SAN ANTONIO DR. Direction 1

Begin Time	Int. Total	Motor cycle	Car w/ trailr	Pickup /Van	2 Axle Bus	3 Axle 6 Tire	4 Axle Single	4 Axle Single	Class 3 Axle Eight	3 Axle 6/7 Ax w/ Trl	5 Axle Single	6 Axle Multi	6 Axle Multi	7 Axle Multi	No Class
12:00 pm	12	0	11	1	0	0	0	0	0	0	0	0	0	0	0
12:15	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
12:30	9	0	6	1	0	0	0	0	0	0	0	0	0	0	2
12:45	13	0	9	1	0	1	1	0	0	0	0	0	0	0	1
Hour Total	36	0	28	3	0	1	1	0	0	0	0	0	0	0	3
01:00 pm	9	0	8	1	0	0	0	0	0	0	0	0	0	0	0
01:15	16	0	12	4	0	0	0	0	0	0	0	0	0	0	0
01:30	14	1	12	1	0	0	0	0	0	0	0	0	0	0	0
01:45	11	0	11	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	50	1	43	6	0	0	0	0	0	0	0	0	0	0	0
02:00 pm	11	0	11	0	0	0	0	0	0	0	0	0	0	0	0
02:15	11	0	10	1	0	0	0	0	0	0	0	0	0	0	0
02:30	7	0	4	2	0	0	0	1	0	0	0	0	0	0	0
02:45	7	0	4	3	0	0	0	0	0	0	0	0	0	0	0
Hour Total	36	0	29	6	0	0	0	1	0	0	0	0	0	0	0
03:00 pm	7	0	6	1	0	0	0	0	0	0	0	0	0	0	0
03:15	10	0	9	1	0	0	0	0	0	0	0	0	0	0	0
03:30	14	0	13	1	0	0	0	0	0	0	0	0	0	0	0
03:45	14	0	10	4	0	0	0	0	0	0	0	0	0	0	0
Hour Total	45	0	38	7	0	0	0	0	0	0	0	0	0	0	0
04:00 pm	15	0	13	2	0	0	0	0	0	0	0	0	0	0	0
04:15	5	0	4	1	0	0	0	0	0	0	0	0	0	0	0
04:30	10	0	8	2	0	0	0	0	0	0	0	0	0	0	0
04:45	10	0	8	1	0	1	0	0	0	0	0	0	0	0	0
Hour Total	40	0	33	6	0	1	0	0	0	0	0	0	0	0	0
05:00 pm	11	0	11	0	0	0	0	0	0	0	0	0	0	0	0
05:15	9	0	7	1	0	0	1	0	0	0	0	0	0	0	0
05:30	10	0	7	1	0	1	0	0	0	0	0	0	0	0	1
05:45	22	0	16	5	0	1	0	0	0	0	0	0	0	0	0
Hour Total	52	0	41	7	0	2	1	0	0	0	0	0	0	0	1
06:00 pm	25	0	17	7	0	1	0	0	0	0	0	0	0	0	0
06:15	20	0	16	4	0	0	0	0	0	0	0	0	0	0	0
06:30	22	0	20	2	0	0	0	0	0	0	0	0	0	0	0
06:45	16	0	11	4	0	0	0	0	0	0	0	0	0	0	1
Hour Total	83	0	64	17	0	1	0	0	0	0	0	0	0	0	1
07:00 pm	17	0	14	3	0	0	0	0	0	0	0	0	0	0	0
07:15	12	0	12	0	0	0	0	0	0	0	0	0	0	0	0
07:30	17	0	15	1	0	0	0	0	0	0	0	0	0	0	1
07:45	8	0	5	3	0	0	0	0	0	0	0	0	0	0	0
Hour Total	54	0	46	7	0	0	0	0	0	0	0	0	0	0	1
08:00 pm	9	0	7	1	0	0	0	0	0	0	0	0	0	0	1
08:15	5	0	4	1	0	0	0	0	0	0	0	0	0	0	0
08:30	9	0	7	2	0	0	0	0	0	0	0	0	0	0	0
08:45	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	26	0	21	4	0	0	0	0	0	0	0	0	0	0	1

ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 00000029651
Start Date: 12/14/19
File I.D. : 26951C
Page : 14

Street name :VIRGINIA RD. N/O SAN ANTONIO DR. Direction 1

Begin Time	Int. Total	Motor cycle	Car w/ trailr	Pickup /Van	2 Axle Bus	3 Axle 6 Tire	4 Axle Single	4 Axle Single	Class 3 Axle Eight	3 Axle 6/7 Ax w/ Trl	5 Axle Single	6 Axle Multi	7 Axle Multi	Multi	No Class
09:00 pm	4	0	2	1	0	1	0	0	0	0	0	0	0	0	0
09:15	4	0	3	1	0	0	0	0	0	0	0	0	0	0	0
09:30	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0
09:45	4	0	2	1	0	0	0	0	0	0	0	0	0	0	1
Hour Total	17	0	12	3	0	1	0	0	0	0	0	0	0	0	1
10:00 pm	5	0	4	1	0	0	0	0	0	0	0	0	0	0	0
10:15	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
10:30	4	0	2	2	0	0	0	0	0	0	0	0	0	0	0
10:45	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	12	0	9	3	0	0	0	0	0	0	0	0	0	0	0
11:00 pm	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
11:15	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
11:30	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0
11:45	7	0	5	2	0	0	0	0	0	0	0	0	0	0	0
Hour Total	14	0	12	2	0	0	0	0	0	0	0	0	0	0	0
Day Totals	743	1	594	118	*	8	3	1	1	*	*	*	*	*	17 *
12:00 12/19	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
12:15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:30	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	4	0	3	0	0	0	0	0	0	0	0	0	0	0	1
01:00 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
01:45	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0
02:00 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45	3	0	2	1	0	0	0	0	0	0	0	0	0	0	0
Hour Total	4	0	2	1	0	0	0	0	0	0	0	0	0	0	1
05:00 am	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
05:15	3	0	2	1	0	0	0	0	0	0	0	0	0	0	0
05:30	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0
05:45	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Hour Total	10	0	8	2	0	0	0	0	0	0	0	0	0	0	0

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ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000296511
Start Date: 12/14/1999
File I.D. : 26951C

Street name :VIRGINIA RD. N/O SAN ANTONIO DR. Direction 1 Page : 15

Begin Time	Int. Total	Motor cycle	Car w/ trailr	Pickup /Van	Bus	2 Axle 6 Tire	3 Axle Single	4 Axle Single	Class Eight	3 Axle w/ Trl	6/7 Ax Single	5 Axle Multi	6 Axle Multi	7 Axle Multi	No Class
06:00 am	5	0	3	2	0	0	0	0	0	0	0	0	0	0	0
06:15	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0
06:30	6	0	5	1	0	0	0	0	0	0	0	0	0	0	0
06:45	6	0	4	1	0	0	0	0	0	0	0	0	0	0	1
Hour Total	20	0	15	4	0	0	0	0	0	0	0	0	0	0	1
07:00 am	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0
07:15	7	0	5	1	0	1	0	0	0	0	0	0	0	0	0
07:30	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0
07:45	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	16	0	14	1	0	1	0	0	0	0	0	0	0	0	0
08:00 am	7	0	6	1	0	0	0	0	0	0	0	0	0	0	0
08:15	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
08:30	3	0	2	1	0	0	0	0	0	0	0	0	0	0	0
08:45	9	0	6	3	0	0	0	0	0	0	0	0	0	0	0
Hour Total	21	0	16	5	0	0	0	0	0	0	0	0	0	0	0
09:00 am	7	0	7	0	0	0	0	0	0	0	0	0	0	0	0
09:15	9	0	9	0	0	0	0	0	0	0	0	0	0	0	0
09:30	9	0	7	2	0	0	0	0	0	0	0	0	0	0	0
09:45	11	0	10	1	0	0	0	0	0	0	0	0	0	0	0
Hour Total	36	0	33	3	0	0	0	0	0	0	0	0	0	0	0
10:00 am	14	0	9	4	0	0	0	0	0	0	0	0	0	0	1
10:15	8	0	7	0	0	0	0	0	0	0	0	0	0	0	1
10:30	6	0	5	1	0	0	0	0	0	0	0	0	0	0	0
10:45	11	0	11	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	39	0	32	5	0	0	0	0	0	0	0	0	0	0	2
11:00 am	7	0	6	0	0	0	0	0	0	0	0	0	0	0	1
11:15	13	0	8	4	0	1	0	0	0	0	0	0	0	0	0
11:30	8	0	8	0	0	0	0	0	0	0	0	0	0	0	0
11:45	6	0	5	1	0	0	0	0	0	0	0	0	0	0	0
Hour Total	34	0	27	5	0	1	0	0	0	0	0	0	0	0	1
12:00 pm	13	0	9	2	0	0	0	0	0	0	0	0	0	0	2
12:15	10	0	8	2	0	0	0	0	0	0	0	0	0	0	0
12:30	11	0	10	0	0	0	1	0	0	0	0	0	0	0	0
12:45	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	38	0	31	4	0	0	1	0	0	0	0	0	0	0	2
01:00 pm	11	0	7	3	0	1	0	0	0	0	0	0	0	0	0
01:15	9	0	6	1	0	0	1	0	0	0	0	0	0	0	1
01:30	13	0	10	3	0	0	0	0	0	0	0	0	0	0	0
01:45	14	0	10	3	0	0	0	0	0	0	0	0	0	0	1
Hour Total	47	0	33	10	0	1	1	0	0	0	0	0	0	0	2
02:00 pm	11	0	9	1	0	0	1	0	0	0	0	0	0	0	0
02:15	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0
02:30	8	1	5	1	0	0	0	0	0	0	0	0	0	0	1
02:45	10	0	7	2	0	0	0	0	0	0	0	0	0	0	1
Hour Total	33	1	25	4	0	0	1	0	0	0	0	0	0	0	2

ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 00000029[illegible]511
Start Date: 12/14/1[illegible]
File I.D. : 26951C
Page : 16

Street name :VIRGINIA RD. N/O SAN ANTONIO DR. Direction 1

Begin Time	Int. Total	Motor cycle	Car w/ trailr	Pickup /Van	Bus	2 Axle 6 Tire	3 Axle Single	4 Axle Single	Class Eight	3 Axle w/ Trl	6/7 Ax Single	5 Axle Multi	6 Axle Multi	7 Axle Multi	No Class
03:00 pm	10	0	4	3	0	0	0	1	0	0	0	0	0	0	2
03:15	10	1	7	1	0	1	0	0	0	0	0	0	0	0	0
03:30	17	1	9	5	0	1	0	0	0	0	0	0	0	0	1
03:45	23	2	17	4	0	0	0	0	0	0	0	0	0	0	0
Hour Total	60	4	37	13	0	2	0	1	0	0	0	0	0	0	3
04:00 pm	35	2	12	15	0	4	1	0	0	0	0	0	0	0	1
04:15	21	2	13	5	0	1	0	0	0	0	0	0	0	0	0
04:30	18	0	10	6	0	2	0	0	0	0	0	0	0	0	0
04:45	16	3	7	6	0	0	0	0	0	0	0	0	0	0	0
Hour Total	90	7	42	32	0	7	1	0	0	0	0	0	0	0	1
05:00 pm	13	1	6	6	0	0	0	0	0	0	0	0	0	0	0
05:15	6	0	5	1	0	0	0	0	0	0	0	0	0	0	0
05:30	9	1	5	2	0	1	0	0	0	0	0	0	0	0	0
05:45	8	0	4	4	0	0	0	0	0	0	0	0	0	0	0
Hour Total	36	2	20	13	0	1	0	0	0	0	0	0	0	0	0
06:00 pm	9	2	4	3	0	0	0	0	0	0	0	0	0	0	0
06:15	14	1	6	7	0	0	0	0	0	0	0	0	0	0	0
06:30	13	1	9	1	0	0	0	0	0	0	0	0	0	0	2
06:45	10	2	3	4	0	0	0	1	0	0	0	0	0	0	0
Hour Total	46	6	22	15	0	0	0	1	0	0	0	0	0	0	2
07:00 pm	11	1	9	0	0	0	0	0	0	0	0	0	0	0	1
07:15	6	0	5	1	0	0	0	0	0	0	0	0	0	0	0
07:30	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
07:45	6	1	4	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	24	2	18	2	0	0	0	0	0	0	0	0	0	0	2
08:00 pm	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
08:15	6	1	4	0	0	1	0	0	0	0	0	0	0	0	0
08:30	6	1	4	0	0	0	1	0	0	0	0	0	0	0	0
08:45	5	0	1	4	0	0	0	0	0	0	0	0	0	0	0
Hour Total	19	2	11	4	0	1	1	0	0	0	0	0	0	0	0
09:00 pm	7	1	2	3	0	1	0	0	0	0	0	0	0	0	0
09:15	7	0	3	4	0	0	0	0	0	0	0	0	0	0	0
09:30	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0
09:45	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	21	1	12	7	0	1	0	0	0	0	0	0	0	0	0
10:00 pm	4	1	3	0	0	0	0	0	0	0	0	0	0	0	0
10:15	3	0	2	1	0	0	0	0	0	0	0	0	0	0	0
10:30	3	1	0	2	0	0	0	0	0	0	0	0	0	0	0
10:45	3	0	2	1	0	0	0	0	0	0	0	0	0	0	0
Hour Total	13	2	7	4	0	0	0	0	0	0	0	0	0	0	0
11:00 pm	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0
11:15	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
11:30	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	4	0	3	1	0	0	0	0	0	0	0	0	0	0	0
Day Totals	617	28	412	135	*	15	5	2	*	*	*	*	*	*	20	*

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ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000296511
Start Date: 12/14/1999
File I.D. : 26951C
Page : 17

Street name :VIRGINIA RD. N/O SAN ANTONIO DR. Direction 1

Begin Time	Int. Total	Motor cycle	Car w/ trailr	Pickup /Van	Bus	2 Axle 6 Tire	3 Axle Single	4 Axle Single	Class Eight	3 Axle w/ Trl	6/7 Ax Single	5 Axle Multi	6 Axle Multi	7 Axle Multi	No Class
12:00 12/20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	3	1	1	1	0	0	0	0	0	0	0	0	0	0	0
01:00 am	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0
02:00 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
03:00 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0
04:30	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Hour Total	3	0	0	1	0	0	0	1	0	0	0	0	0	0	1
05:00 am	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
05:15	4	0	3	1	0	0	0	0	0	0	0	0	0	0	0
05:30	5	3	2	0	0	0	0	0	0	0	0	0	0	0	0
05:45	6	0	2	3	0	1	0	0	0	0	0	0	0	0	0
Hour Total	16	3	8	4	0	1	0	0	0	0	0	0	0	0	0
06:00 am	5	0	3	2	0	0	0	0	0	0	0	0	0	0	0
06:15	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
06:30	9	1	4	3	0	0	0	0	0	0	0	0	0	0	1
06:45	3	1	0	1	0	0	1	0	0	0	0	0	0	0	0
Hour Total	18	2	8	6	0	0	1	0	0	0	0	0	0	0	1
07:00 am	6	0	5	1	0	0	0	0	0	0	0	0	0	0	0
07:15	5	0	3	2	0	0	0	0	0	0	0	0	0	0	0
07:30	26	0	12	12	1	0	0	0	0	0	0	0	0	0	1
07:45	21	3	10	6	0	1	0	0	0	0	0	0	0	0	1
Hour Total	58	3	30	21	1	1	0	0	0	0	0	0	0	0	2
08:00 am	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0
08:15	8	0	4	4	0	0	0	0	0	0	0	0	0	0	0
08:30	6	0	2	3	0	0	0	0	0	0	0	0	0	0	1
08:45	16	1	8	5	0	0	0	0	0	0	0	0	0	0	2
Hour Total	32	1	14	14	0	0	0	0	0	0	0	0	0	0	3

ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 00000029511
Start Date: 12/14/19
File I.D. : 26951C
Page : 18

Street name :VIRGINIA RD. N/O SAN ANTONIO DR. Direction 1

Begin Time	Int. Total	Motor cycle	Car w/ trailr	Pickup /Van	2 Axle 6 Tire Bus	3 Axle Single	4 Axle Single	Class Eight	3 Axle w/ Trl	6/7 Ax Single	5 Axle Multi	6 Axle Multi	7 Axle Multi	No Class
09:00 am	12	1	6	4	0	0	0	0	0	0	0	0	0	1
09:15	9	2	4	2	0	1	0	0	0	0	0	0	0	0
09:30	26	0	13	10	0	1	0	0	0	0	0	0	0	2
09:45	22	2	14	5	1	0	0	0	0	0	0	0	0	0
Hour Total	69	5	37	21	1	2	0	0	0	0	0	0	0	3
10:00 am	20	3	5	8	0	1	0	0	0	0	0	0	0	3
10:15	17	4	8	4	0	1	0	0	0	0	0	0	0	0
10:30	12	3	5	4	0	0	0	0	0	0	0	0	0	0
10:45	22	1	8	11	0	1	0	0	0	0	0	0	0	1
Hour Total	71	11	26	27	0	3	0	0	0	0	0	0	0	4
11:00 am	16	2	5	7	0	2	0	0	0	0	0	0	0	0
11:15	26	3	13	5	0	1	0	0	2	0	0	0	0	2
11:30	16	2	7	6	0	0	0	0	0	0	0	0	0	1
11:45	17	3	9	3	0	1	0	0	0	0	0	0	0	1
Hour Total	75	10	34	21	0	4	0	0	2	0	0	0	0	4
12:00 pm	20	3	9	2	0	4	0	0	1	0	0	0	0	1
12:15	12	3	6	3	0	0	0	0	0	0	0	0	0	0
12:30	10	1	5	3	0	1	0	0	0	0	0	0	0	0
12:45	17	4	6	3	1	3	0	0	0	0	0	0	0	0
Hour Total	59	11	26	11	1	8	0	0	1	0	0	0	0	1
01:00 pm	11	2	4	1	0	2	0	0	2	0	0	0	0	0
01:15	12	1	4	3	0	4	0	0	0	0	0	0	0	0
01:30	6	1	4	1	0	0	0	0	0	0	0	0	0	0
01:45	14	0	3	7	0	3	0	0	0	0	0	0	0	1
Hour Total	43	4	15	12	0	9	0	0	2	0	0	0	0	1
02:00 pm	10	0	4	4	0	1	0	0	0	0	0	0	0	1
02:15	7	1	3	3	0	0	0	0	0	0	0	0	0	0
02:30	9	1	4	4	0	0	0	0	0	0	0	0	0	0
02:45	17	3	10	2	0	1	0	1	0	0	0	0	0	0
Hour Total	43	5	21	13	0	2	0	1	0	0	0	0	0	1
03:00 pm	8	1	1	3	0	1	0	0	0	0	0	0	0	2
03:15	10	0	5	3	0	1	0	0	0	0	0	0	0	1
03:30	9	1	2	6	0	0	0	0	0	0	0	0	0	0
03:45	7	2	2	2	0	1	0	0	0	0	0	0	0	0
Hour Total	34	4	10	14	0	3	0	0	0	0	0	0	0	3
04:00 pm	7	0	3	3	0	0	0	0	0	1	0	0	0	0
04:15	12	0	6	6	0	0	0	0	0	0	0	0	0	0
04:30	9	1	4	3	0	1	0	0	0	0	0	0	0	0
04:45	12	0	8	4	0	0	0	0	0	0	0	0	0	0
Hour Total	40	1	21	16	0	1	0	0	0	1	0	0	0	0
05:00 pm	10	0	7	2	0	1	0	0	0	0	0	0	0	0
05:15	9	2	2	5	0	0	0	0	0	0	0	0	0	0
05:30	10	1	7	2	0	0	0	0	0	0	0	0	0	0
05:45	11	4	6	0	0	0	0	0	0	0	0	0	0	1
Hour Total	40	7	22	9	0	1	0	0	0	0	0	0	0	1

ACCUTEK
21114 TRIGGER LANE
DIAMOND BAR, CA 91765
PHONE (909)595-6199, FAX (909)595-6022

Site Code : 000000296511
Start Date: 12/14/1999
File I.D. : 26951C
Page : 19

Street name :VIRGINIA RD. N/O SAN ANTONIO DR. Direction 1

Begin Time	Int. Total	Motor cycle	Car w/ trailr	Pickup /Van	Bus	2 Axle 6 Tire	3 Axle Single	4 Axle Single	Class Eight	3 Axle w/ Trl	6/7 Ax Single	5 Axle Multi	6 Axle Multi	7 Axle Multi	No Class
06:00 pm	7	0	5	2	0	0	0	0	0	0	0	0	0	0	0
06:15	6	2	3	1	0	0	0	0	0	0	0	0	0	0	0
06:30	7	0	4	3	0	0	0	0	0	0	0	0	0	0	0
06:45	7	1	3	2	0	0	0	0	1	0	0	0	0	0	0
Hour Total	27	3	15	8	0	0	0	0	1	0	0	0	0	0	0
07:00 pm	9	4	3	2	0	0	0	0	0	0	0	0	0	0	0
07:15	11	1	9	0	0	1	0	0	0	0	0	0	0	0	0
07:30	4	1	3	0	0	0	0	0	0	0	0	0	0	0	0
07:45	5	1	4	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	29	7	19	2	0	1	0	0	0	0	0	0	0	0	0
08:00 pm	5	2	3	0	0	0	0	0	0	0	0	0	0	0	0
08:15	7	1	4	1	0	1	0	0	0	0	0	0	0	0	0
08:30	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0
08:45	6	0	4	2	0	0	0	0	0	0	0	0	0	0	0
Hour Total	21	3	14	3	0	1	0	0	0	0	0	0	0	0	0
09:00 pm	6	0	5	0	0	1	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30	5	1	3	1	0	0	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	11	1	8	1	0	1	0	0	0	0	0	0	0	0	0
10:00 pm	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0
10:15	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0
10:30	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	6	3	0	3	0	0	0	0	0	0	0	0	0	0	0
11:00 pm	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0
11:45	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	5	0	2	2	0	1	0	0	0	0	0	0	0	0	0
Day Totals	706	85	334	210	3	39	1	2	6	1	*	*	*	*	25	*
12:00 12/21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
12:30	3	0	2	0	0	0	0	0	0	0	0	0	0	0	1
12:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	4	0	3	0	0	0	0	0	0	0	0	0	0	0	1
01:00 am	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00 am	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	3	0	2	1	0	0	0	0	0	0	0	0	0	0	0

LINSCOTT LAW & GREENSPAN
ENGINEERS

PARKING SURVEY DATA

12/15/99 WED 14:53 FAX 714 641 0139 L L G ENGINEERS 002

A-43

TABLE 1

PARKING SURVEY DATA - THURSDAY, DEC. 16, 1999
Rancho Los Cerritos, Long Beach

Time of Day	On-Site	Virginia Road		Total
		n/o Country Club d/w	s/o Country Club d/w	
9:30 AM	10	0	6	16
10:00 AM	10	0	8	18
10:30 AM	11	0	8	19
11:00 AM	12	0	6	18
11:30 AM	10	0	3	13
12:00 PM	13	0	5	18
12:30 PM	13	4	8	25
1:00 PM	14	6	8	28
1:30 PM	9	6	8	23
2:00 PM	9	5	7	21
2:30 PM	9	3	6	18
3:00 PM	8	3	2	13
3:30 PM	8	2	1	11
4:00 PM	7	2	0	9
4:30 PM	7	2	0	9
5:00 PM	7	2	0	9
5:30 PM	9	2	0	11

\2000\2992082\tables\2082-thurs.xls

12/15/99 WED 14:54 FAX 714 641 0139 L L G ENGINEERS 003

A-44

TABLE 2

PARKING SURVEY DATA - FRIDAY, DEC. 17, 1999
Rancho Los Cerritos, Long Beach

Time of Day	On-Site	Virginia Road		Total
		n/o Country Club d/w	s/o Country Club d/w	
9:30 AM	4	0	8	12
10:00 AM	3	0	5	8
10:30 AM	3	0	6	9
11:00 AM	3	0	3	6
11:30 AM	3	0	1	4
12:00 PM	3	0	1	4
12:30 PM	3	0	1	4
1:00 PM	3	0	3	6
1:30 PM	4	0	2	6
2:00 PM	5	0	3	8
2:30 PM	5	0	3	8
3:00 PM	9	0	3	12
3:30 PM	5	0	2	7
4:00 PM	5	0	2	7
4:30 PM	7	0	1	8
5:00 PM	7	0	0	7
5:30 PM	6	0	0	6

\2000\2992082\tables\2082-fri.xls

12/15/99 WED 14:55 FAX 714 641 0139 L L G ENGINEERS 004

A-45

TABLE 3

PARKING SURVEY DATA - SATURDAY, DEC. 18, 1999
Rancho Los Cerritos, Long Beach

Time of Day	On-Site	Virginia Road		Total
		n/o Country Club d/w	s/o Country Club d/w	
9:30 AM	0	0	1	1
10:00 AM	0	0	1	1
10:30 AM	0	0	2	2
11:00 AM	0	0	1	1
11:30 AM	0	0	0	0
12:00 PM	0	0	1	1
12:30 PM	3	0	1	4
1:00 PM	5	0	1	6
1:30 PM	4	0	1	5
2:00 PM	8	0	0	8
2:30 PM	8	0	0	8
3:00 PM	7	0	1	8
3:30 PM	6	0	1	7
4:00 PM	5	0	1	6
4:30 PM	3	0	1	4
5:00 PM	3	0	1	4
5:30 PM	3	0	1	4

\2000\2992082\tables\2082-sat.xls

12/15/99 WED 14:56 FAX 714 641 0139 L L G ENGINEERS 005

A-40

TABLE 4

PARKING SURVEY DATA - SUNDAY, DEC. 19, 1999
Rancho Los Cerritos, Long Beach

Time of Day	On-Site	Virginia Road		Total
		n/o Country Club d/w	s/o Country Club d/w	
9:30 AM	0	0	1	1
10:00 AM	0	0	0	0
10:30 AM	0	0	0	0
11:00 AM	0	0	1	1
11:30 AM	0	0	0	0
12:00 PM	0	0	0	0
12:30 PM	6	0	0	6
1:00 PM	10	0	0	10
1:30 PM	14	0	0	14
2:00 PM	15	0	0	15
2:30 PM	14	0	0	14
3:00 PM	14	0	1	15
3:30 PM	8	0	1	9
4:00 PM	4	0	1	5
4:30 PM	2	0	1	3
5:00 PM	2	0	1	3
5:30 PM	1	0	1	2

\2000\2992082\tables\2082-sun.xls

12/15/99 WED 14:57 FAX 714 641 0139 L L G ENGINEERS 006

A-47

TABLE 5

PARKING SURVEY DATA - MONDAY, DEC. 20, 1999
Rancho Los Cerritos, Long Beach

Time of Day	On-Site	Virginia Road		Total
		n/o Country Club d/w	s/o Country Club d/w	
9:30 AM	7	0	2	9
10:00 AM	7	0	6	13
10:30 AM	7	0	5	12
11:00 AM	7	0	2	9
11:30 AM	9	0	5	14
12:00 PM	9	0	4	13
12:30 PM	8	0	2	10
1:00 PM	6	0	1	7
1:30 PM	6	0	2	8
2:00 PM	6	0	5	11
2:30 PM	6	0	4	10
3:00 PM	6	0	3	9
3:30 PM	5	0	3	8
4:00 PM	3	0	4	7
4:30 PM	2	0	3	5
5:00 PM	3	0	2	5
5:30 PM	3	0	1	4

\2000\2992082\tables\2082-mon.xls

LINSCOTT LAW & GREENSPAN
ENGINEERS

APPENDIX B

INTERSECTION CAPACITY UTILIZATION (ICU) AND HIGHWAY CAPACITY MANUAL (HCM) CALCULATION WORKSHEETS

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: Long Beach Boulevard
E-W St: San Antonio Drive - Split Phase
Project: Rancho Los Cerritos Historic Site
File: 2000\2992082\ICU\icu1

Long Beach Boulevard @ San Antonio Drive
Peak hr: AM
Annual Growth: 2.00%

Date: 04/10/2000
Date of Count: 1999
Projection Year: 2004

	1999 EXISTING TRAFFIC				2004 WITH AMBIENT GROWTH					2004 WITH EXISTING RANCHO TRAFFIC					2004 WITH RANCHO "GROWTH"					2004 WITH RANCHO EXPANSION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	36	1	1600	0.023	4	40	1	1600	0.025	1	41	1	1600	0.025	0	41	1	1600	0.025	0	41	1	1600	0.025
Nb Thru	625	2	3200	0.235 *	63	688	2	3200	0.259 *	0	688	2	3200	0.259 *	0	688	2	3200	0.259 *	0	688	2	3200	0.259 *
Nb Right	127	0	0	-	13	140	0	0	-	0	140	0	0	-	0	140	0	0	-	0	140	0	0	-
Sb Left	51	1	1600	0.032 *	5	56	1	1600	0.035 *	0	56	1	1600	0.035 *	0	56	1	1600	0.035 *	0	56	1	1600	0.035 *
Sb Thru	708	2	3200	0.243	71	779	2	3200	0.267	0	779	2	3200	0.267	0	779	2	3200	0.267	0	779	2	3200	0.267
Sb Right	68	0	0	-	7	75	0	0	-	0	75	0	0	-	1	76	0	0	-	0	76	0	0	-
Eb Left	75	1	1600	0.047	8	83	1	1600	0.052	0	83	1	1600	0.052	0	83	1	1600	0.052	0	83	1	1600	0.052
Eb Thru	74	1	1600	0.075 *	7	81	1	1600	0.083 *	1	82	1	1600	0.083 *	0	82	1	1600	0.083 *	0	82	1	1600	0.083 *
Eb Right	46	0	0	-	5	51	0	0	-	0	51	0	0	-	0	51	0	0	-	0	51	0	0	-
Wb Left	215	0	0	0.000	22	237	0	0	0.000	0	237	0	0	0.000	0	237	0	0	0.000	0	237	0	0	0.000
Wb Thru	117	2	3200	0.104 *	12	129	2	3200	0.114 *	1	130	2	3200	0.114 *	1	131	2	3200	0.115 *	0	131	2	3200	0.115 *
Wb Right	103	1	1600	0.064	10	113	1	1600	0.071	0	113	1	1600	0.071	0	113	1	1600	0.071	0	113	1	1600	0.071
Yellow Allowance				0.140 *					0.140 *					0.140 *					0.140 *					0.140 *
ICU				0.586					0.631					0.631					0.632					0.632
LOS				A					B					B					B					B

part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Accutek
Capacity expressed in vehicles per hour of green.

ICU Impact: 0.000
Significant Impact: NO

ICU Impact: 0.001
Significant Impact: NO

ICU Impact: 0.000
Significant Impact: NO

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: Long Beach Boulevard
E-W St: San Antonio Drive - Split Phase
Project: Rancho Los Cerritos Historic Site
File: 2000\2992082\ICU\Icu1

Long Beach Boulevard @ San Antonio Drive
Peak hr: PM
Annual Growth: 2.00%

Date: 04/10/2000
Date of Count: 1999
Projection Year: 2004

	1999 EXISTING TRAFFIC				2004 WITH AMBIENT GROWTH					2004 WITH EXISTING RANCHO TRAFFIC					2004 WITH RANCHO * GROWTH					2004 WITH RANCHO EXPANSION				
Movement	Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	34	1	1600	0.021	3	37	1	1600	0.023	1	38	1	1600	0.024	0	38	1	1600	0.024	0	38	1	1600	0.024
Nb Thru	518	2	3200	0.328 *	82	900	2	3200	0.361 *	0	900	2	3200	0.361 *	0	900	2	3200	0.361 *	0	900	2	3200	0.361 *
Nb Right	233	0	0	-	23	256	0	0	-	0	256	0	0	-	0	256	0	0	-	0	256	0	0	-
Sb Left	125	1	1600	0.078 *	13	138	1	1600	0.086 *	0	138	1	1600	0.086 *	0	138	1	1600	0.086 *	0	138	1	1600	0.086 *
Sb Thru	784	2	3200	0.262	78	862	2	3200	0.288	0	862	2	3200	0.289	0	862	2	3200	0.289	0	862	2	3200	0.289
Sb Right	55	0	0	-	6	61	0	0	-	1	62	0	0	-	0	62	0	0	-	0	62	0	0	-
Eb Left	64	1	1600	0.040	6	70	1	1600	0.044	4	74	1	1600	0.047	4	78	1	1600	0.049	0	78	1	1600	0.049
Eb Thru	118	1	1600	0.099 *	12	130	1	1600	0.109 *	6	136	1	1600	0.114 *	6	142	1	1600	0.119 *	0	142	1	1600	0.119 *
Eb Right	41	0	0	-	4	45	0	0	-	2	47	0	0	-	2	49	0	0	-	0	49	0	0	-
Wb Left	179	0	0	0.000	18	197	0	0	0.000	0	197	0	0	0.000	0	197	0	0	0.000	0	197	0	0	0.000
Wb Thru	87	2	3200	0.083 *	9	96	2	3200	0.091 *	2	98	2	3200	0.092 *	0	98	2	3200	0.092 *	0	98	2	3200	0.092 *
Wb Right	82	1	1600	0.051	8	90	1	1600	0.056	0	90	1	1600	0.056	0	90	1	1600	0.056	0	90	1	1600	0.056
Yellow Allowance				0.140 *					0.140 *					0.140 *					0.140 *					0.140 *
ICU				0.728					0.787					0.793					0.798					0.798
LOS				C					C					C					C					C

part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Accutek
Capacity expressed in vehicles per hour of green.

ICU Impact: 0.006
Significant Impact: NO

ICU Impact: 0.005
Significant Impact: NO

ICU Impact: 0.000
Significant Impact: NO

B-2

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1560 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: Virginia Road
E-W St: San Antonio Drive
Project: Rancho Los Cerritos Historic Site
File: 2000\2992062\ICU\icu2

Virginia Road @ San Antonio Drive
Peak hr: AM
Annual Growth: 2.00%

Date: 04/10/2000
Date of Count: 1999
Projection Year: 2004

Movement	1999 EXISTING TRAFFIC Volume	Lanes	Capacity	V/C Ratio	2004 WITH AMBIENT GROWTH Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	2004 WITH EXISTING RANCHO TRAFFIC Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	2004 WITH RANCHO "GROWTH" Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	2004 WITH RANCHO EXPANSION Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	8	0	0	0.000	1	9	0	0	0.000	0	9	0	0	0.000	0	9	0	0	0.000	0	9	0	0	0.000
Nb Thru	23	1	1600	0.029 *	2	25	1	1600	0.032 *	1	26	1	1600	0.032 *	1	27	1	1600	0.033 *	0	27	1	1600	0.033 *
Nb Right	15	0	0	-	2	17	0	0	-	0	17	0	0	-	0	17	0	0	-	0	17	0	0	-
Sb Left	16	0	0	0.000 *	2	18	0	0	0.000 *	1	19	0	0	0.000 *	0	19	0	0	0.000 *	0	19	0	0	0.000 *
Sb Thru	8	1	1600	0.018	1	9	1	1600	0.018	0	9	1	1600	0.019	0	9	1	1600	0.019	0	9	1	1600	0.019
Sb Right	2	0	0	-	0	2	0	0	-	0	2	0	0	-	0	2	0	0	-	0	2	0	0	-
Eb Left	2	0	0	0.000 *	0	2	0	0	0.000 *	0	2	0	0	0.000 *	0	2	0	0	0.000 *	0	2	0	0	0.000 *
Eb Thru	200	1	1600	0.131	20	220	1	1600	0.144	0	220	1	1600	0.144	0	220	1	1600	0.144	0	220	1	1600	0.144
Eb Right	7	0	0	-	1	8	0	0	-	0	8	0	0	-	0	8	0	0	-	0	8	0	0	-
Wb Left	6	0	0	0.000	1	7	0	0	0.000	0	7	0	0	0.000	0	7	0	0	0.000	0	7	0	0	0.000
Wb Thru	206	1	1600	0.148 *	21	227	1	1600	0.162 *	0	227	1	1600	0.163 *	0	227	1	1600	0.165 *	0	227	1	1600	0.165 *
Wb Right	24	0	0	-	2	26	0	0	-	1	27	0	0	-	3	30	0	0	-	0	30	0	0	-
Yellow Allowance				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.277					0.294					0.295					0.298					0.298
LOS				A					A					A					A					A

part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Accutek
Capacity expressed in vehicles per hour of green.

ICU Impact: 0.001
Significant Impact: NO

ICU Impact: 0.003
Significant Impact: NO

ICU Impact: 0.000
Significant Impact: NO

B-2

LINSCOTT, LAW & GREENSPAN, ENGINEERS
1580 Corporate Drive, Suite 122, Costa Mesa CA 92626
(714) 641-1587

INTERSECTION CAPACITY UTILIZATION

N-S St: Virginia Road
E-W St: San Antonio Drive
Project: Rancho Los Cerritos Historic Site
File: 2000\2992082\ICU\icu2

Virginia Road @ San Antonio Drive
Peak hr: PM
Annual Growth: 2.00%

Date: 04/10/2000
Date of Count: 1999
Projection Year: 2004

Movement	1999 EXISTING TRAFFIC Volume	Lanes	Capacity	V/C Ratio	2004 WITH AMBIENT GROWTH Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	2004 WITH EXISTING RANCHO TRAFFIC Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	2004 WITH RANCHO GROWTH Added Volume	Total Volume	Lanes	Capacity	V/C Ratio	2004 WITH RANCHO EXPANSION Added Volume	Total Volume	Lanes	Capacity	V/C Ratio
Nb Left	13	0	0	0.000 *	1	14	0	0	0.000 *	0	14	0	0	0.000 *	0	14	0	0	0.000 *	0	14	0	0	0.000 *
Nb Thru	8	1	1600	0.025	1	9	1	1600	0.028	1	10	1	1600	0.028	0	10	1	1600	0.028	0	10	1	1600	0.028
Nb Right	19	0	0	-	2	21	0	0	-	0	21	0	0	-	0	21	0	0	-	0	21	0	0	-
Sb Left	28	0	0	0.000	3	31	0	0	0.000	12	43	0	0	0.000	12	55	0	0	0.000	0	55	0	0	0.000
Sb Thru	23	1	1600	0.033 *	2	25	1	1600	0.036 *	5	30	1	1600	0.048 *	5	35	1	1600	0.059 *	0	35	1	1600	0.059 *
Sb Right	2	0	0	-	0	2	0	0	-	1	3	0	0	-	1	4	0	0	-	0	4	0	0	-
Eb Left	1	0	0	0.000 *	0	1	0	0	0.000 *	0	1	0	0	0.000 *	0	1	0	0	0.000 *	0	1	0	0	0.000 *
Eb Thru	150	1	1600	0.099	15	165	1	1600	0.109	0	165	1	1600	0.109	0	165	1	1600	0.109	0	165	1	1600	0.109
Eb Right	7	0	0	-	1	8	0	0	-	0	8	0	0	-	0	8	0	0	-	0	8	0	0	-
Wb Left	23	0	0	0.000	2	25	0	0	0.000	0	25	0	0	0.000	0	25	0	0	0.000	0	25	0	0	0.000
Wb Thru	146	1	1600	0.129 *	15	161	1	1600	0.142 *	0	161	1	1600	0.145 *	0	161	1	1600	0.145 *	0	161	1	1600	0.145 *
Wb Right	38	0	0	-	4	42	0	0	-	4	46	0	0	-	1	47	0	0	-	0	47	0	0	-
Yellow Allowance				0.100 *					0.100 *					0.100 *					0.100 *					0.100 *
ICU				0.262					0.278					0.293					0.304					0.304
LOS				A					A					A					A					A

part of ICU.
** Functions as a separate turn lane, however, is not striped as such.
Counts conducted by: Accutek
Capacity expressed in vehicles per hour of green.

ICU Impact: 0.015
Significant Impact: NO

ICU Impact: 0.011
Significant Impact: NO

ICU Impact: 0.000
Significant Impact: NO

B-4

HCS: Unsignalized Intersections Release 2.1d 2AM-EX.HCO Page 1

Center For Microcomputers In Transportation
University of Florida
512 Weil Hall
Gainesville, FL 32611-2083
Ph: (904) 392-0378

Streets: (N-S) Virginia Road (E-W) San Antonio Drive
Analyst..... CHN
Date of Analysis..... 1/10/0
Other Information.....Existing Year 1999 AM Peak Hour Traffic
All-way Stop-controlled Intersection

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	> 1	< 0	0	> 1	< 0	0	> 1	< 0	0	> 1	< 0
Volumes	2	200	7	6	206	24	8	23	15	16	8	2
PHF	1	1	1	1	1	1	1	1	1	1	1	1

Volume Summary and Capacity Analysis WorkSheet

	EB	WB	NB	SB
LT Flow Rate	2	6	8	16
RT Flow Rate	7	24	15	2
Approach Flow Rate	209	236	46	26
Proportion LT	0.01	0.03	0.17	0.62
Proportion RT	0.03	0.10	0.33	0.08
Opposing Approach Flow Rate	236	209	26	46
Conflicting Approaches Flow Rate	72	72	445	445
Proportion, Subject Approach Flow Rate	0.40	0.46	0.09	0.05
Proportion, Opposing Approach Flow Rate	0.46	0.40	0.05	0.09
Lanes on Subject Approach	1	1	1	1
Lanes on Opposing Approach	1	1	1	1
LT, Opposing Approach	6	2	16	8
RT, Opposing Approach	24	7	2	15
LT, Conflicting Approaches	24	24	8	8
RT, Conflicting Approaches	17	17	31	31
Proportion LT, Opposing Approach	0.03	0.01	0.62	0.17
Proportion RT, Opposing Approach	0.10	0.03	0.08	0.33
Proportion LT, Conflicting Approaches	0.33	0.33	0.02	0.02
Proportion RT, Conflicting Approaches	0.24	0.24	0.07	0.07
Approach Capacity	807	814	70	241

Intersection Performance Summary

Movement	Approach Flow Rate	Approach Capacity	V/C Ratio	Average Total Delay	LOS
EB	209	807	0.26	2.7	A
WB	236	814	0.29	3.0	A
NB	46	70	0.66	12.1	C
SB	26	241	0.11	1.5	A

Intersection Delay = 3.6
Level of Service (Intersection) = A

HCS: Unsignalized Intersections Release 2.1d 2AM-3.xus Page 1

Center For Microcomputers In Transportation
University of Florida
512 Weil Hall
Gainesville, FL 32611-2083
Ph: (904) 392-0378

Streets: (N-S) Virginia Road (E-W) San Antonio Drive
Analyst..... CHN
Date of Analysis..... 1/10/0
Other Information..... Year 2004 AM Peak Hour Background Traffic

All-way Stop-controlled Intersection

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	> 1	< 0	0	> 1	< 0	0	> 1	< 0	0	> 1	< 0
Volumes	2	220	8	7	227	27	9	26	17	19	9	2
PHF	1	1	1	1	1	1	1	1	1	1	1	1

Volume Summary and Capacity Analysis WorkSheet

	EB	WB	NB	SB
LT Flow Rate	2	7	9	19
RT Flow Rate	8	27	17	2
Approach Flow Rate	230	261	52	30
Proportion LT	0.01	0.03	0.17	0.63
Proportion RT	0.03	0.10	0.33	0.07
Opposing Approach Flow Rate	261	230	30	52
Conflicting Approaches Flow Rate	82	82	491	491
Proportion, Subject Approach Flow Rate	0.40	0.46	0.09	0.05
Proportion, Opposing Approach Flow Rate	0.46	0.40	0.05	0.09
Lanes on Subject Approach	1	1	1	1
Lanes on Opposing Approach	1	1	1	1
LT, Opposing Approach	7	2	19	9
RT, Opposing Approach	27	8	2	17
LT, Conflicting Approaches	28	28	9	9
RT, Conflicting Approaches	19	19	35	35
Proportion LT, Opposing Approach	0.03	0.01	0.63	0.17
Proportion RT, Opposing Approach	0.10	0.03	0.07	0.33
Proportion LT, Conflicting Approaches	0.34	0.34	0.02	0.02
Proportion RT, Conflicting Approaches	0.23	0.23	0.07	0.07
Approach Capacity	800	808	67	245

Intersection Performance Summary

Movement	Approach Flow Rate	Approach Capacity	V/C Ratio	Average Total Delay	LOS
EB	230	800	0.29	3.0	A
WB	261	808	0.32	3.4	A
NB	52	67	0.78	19.1	C
SB	30	245	0.12	1.6	A

Intersection Delay = 4.6
Level of Service (Intersection) = A

B-6

HCS: Unsignalized Intersections Release 2.1d 2AM-GROW.HC0 Page 1

Center For Microcomputers In Transportation
University of Florida
512 Weil Hall
Gainesville, FL 32611-2083
Ph: (904) 392-0378

Streets: (N-S) Virginia Road (E-W) San Antonio Drive
Analyst..... CHN
Date of Analysis..... 1/10/0
Other Information..... Year 2004 AM Peak Hour Traffic with Rancho "Growth"
All-way Stop-controlled Intersection

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	> 1	< 0	0	> 1	< 0	0	> 1	< 0	0	> 1	< 0
Volumes	2	220	8	7	227	30	9	27	17	19	9	2
PHF	1	1	1	1	1	1	1	1	1	1	1	1

Volume Summary and Capacity Analysis WorkSheet

	EB	WB	NB	SB
LT Flow Rate	2	7	9	19
RT Flow Rate	8	30	17	2
Approach Flow Rate	230	264	53	30
Proportion LT	0.01	0.03	0.17	0.63
Proportion RT	0.03	0.11	0.32	0.07
Opposing Approach Flow Rate	264	230	30	53
Conflicting Approaches Flow Rate	83	83	494	494
Proportion, Subject Approach Flow Rate	0.40	0.46	0.09	0.05
Proportion, Opposing Approach Flow Rate	0.46	0.40	0.05	0.09
Lanes on Subject Approach	1	1	1	1
Lanes on Opposing Approach	1	1	1	1
LT, Opposing Approach	7	2	19	9
RT, Opposing Approach	30	8	2	17
LT, Conflicting Approaches	28	28	9	9
RT, Conflicting Approaches	19	19	38	38
Proportion LT, Opposing Approach	0.03	0.01	0.63	0.17
Proportion RT, Opposing Approach	0.11	0.03	0.07	0.32
Proportion LT, Conflicting Approaches	0.34	0.34	0.02	0.02
Proportion RT, Conflicting Approaches	0.23	0.23	0.08	0.08
Approach Capacity	801	808	69	247

Intersection Performance Summary

Movement	Approach Flow Rate	Approach Capacity	V/C Ratio	Average Total Delay	LOS
EB	230	801	0.29	3.0	A
WB	264	808	0.33	3.5	A
NB	53	69	0.77	18.5	C
SB	30	247	0.12	1.6	A

Intersection Delay = 4.6
Level of Service (Intersection) = A

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HCS: Unsignalized Intersections Release 2.1d 2AM-EXPA.HC0 Page 1

Center For Microcomputers In Transportation
University of Florida
512 Weil Hall
Gainesville, FL 32611-2083
Ph: (904) 392-0378

Streets: (N-S) Virginia Road (E-W) San Antonio Drive
Analyst..... CHN
Date of Analysis..... 1/10/0
Other Information..... Year 2004 AM Peak Hour Traffic with Rancho "Expanstion"

All-way Stop-controlled Intersection

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	> 1	< 0	0	> 1	< 0	0	> 1	< 0	0	> 1	< 0
Volumes	2	220	8	7	227	30	9	27	17	19	9	2
PHF	1	1	1	1	1	1	1	1	1	1	1	1

Volume Summary and Capacity Analysis WorkSheet

	EB	WB	NB	SB
LT Flow Rate	2	7	9	19
RT Flow Rate	8	30	17	2
Approach Flow Rate	230	264	53	30
Proportion LT	0.01	0.03	0.17	0.63
Proportion RT	0.03	0.11	0.32	0.07
Opposing Approach Flow Rate	264	230	30	53
Conflicting Approaches Flow Rate	83	83	494	494
Proportion, Subject Approach Flow Rate	0.40	0.46	0.09	0.05
Proportion, Opposing Approach Flow Rate	0.46	0.40	0.05	0.09
Lanes on Subject Approach	1	1	1	1
Lanes on Opposing Approach	1	1	1	1
LT, Opposing Approach	7	2	19	9
RT, Opposing Approach	30	8	2	17
LT, Conflicting Approaches	28	28	9	9
RT, Conflicting Approaches	19	19	38	38
Proportion LT, Opposing Approach	0.03	0.01	0.63	0.17
Proportion RT, Opposing Approach	0.11	0.03	0.07	0.32
Proportion LT, Conflicting Approaches	0.34	0.34	0.02	0.02
Proportion RT, Conflicting Approaches	0.23	0.23	0.08	0.08
Approach Capacity	801	808	69	247

Intersection Performance Summary

Movement	Approach Flow Rate	Approach Capacity	V/C Ratio	Average Total Delay	LOS
EB	230	801	0.29	3.0	A
WB	264	808	0.33	3.5	A
NB	53	69	0.77	18.5	C
SB	30	247	0.12	1.6	A

Intersection Delay = 4.6
Level of Service (Intersection) = A

B-8

HCS: Unsignalized Intersections Release 2.1d 2PM-EX.HC0 Page 1

Center For Microcomputers In Transportation
University of Florida
512 Weil Hall
Gainesville, FL 32611-2083
Ph: (904) 392-0378

Streets: (N-S) Virginia Road (E-W) San Antonio Drive
Analyst..... CHN
Date of Analysis..... 1/10/0
Other Information.....Existing Year 1999 PM Peak Hour Traffic
All-way Stop-controlled Intersection

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	> 1	< 0	0	> 1	< 0	0	> 1	< 0	0	> 1	< 0
Volumes	1	150	7	23	146	38	13	8	19	28	23	2
PHF	1	1	1	1	1	1	1	1	1	1	1	1

Volume Summary and Capacity Analysis WorkSheet

	EB	WB	NB	SB
LT Flow Rate	1	23	13	28
RT Flow Rate	7	38	19	2
Approach Flow Rate	158	207	40	53
Proportion LT	0.01	0.11	0.32	0.53
Proportion RT	0.04	0.18	0.47	0.04
Opposing Approach Flow Rate	207	158	53	40
Conflicting Approaches Flow Rate	93	93	365	365
Proportion, Subject Approach Flow Rate	0.34	0.45	0.09	0.12
Proportion, Opposing Approach Flow Rate	0.45	0.34	0.12	0.09
Lanes on Subject Approach	1	1	1	1
Lanes on Opposing Approach	1	1	1	1
LT, Opposing Approach	23	1	28	13
RT, Opposing Approach	38	7	2	19
LT, Conflicting Approaches	41	41	24	24
RT, Conflicting Approaches	21	21	45	45
Proportion LT, Opposing Approach	0.11	0.01	0.53	0.32
Proportion RT, Opposing Approach	0.18	0.04	0.04	0.47
Proportion LT, Conflicting Approaches	0.44	0.44	0.07	0.07
Proportion RT, Conflicting Approaches	0.23	0.23	0.12	0.12
Approach Capacity	700	736	135	292

Intersection Performance Summary

Movement	Approach Flow Rate	Approach Capacity	V/C Ratio	Average Total Delay	LOS
EB	158	700	0.23	2.4	A
WB	207	736	0.28	2.9	A
NB	40	135	0.30	3.1	A
SB	53	292	0.18	2.0	A

Intersection Delay = 2.6
Level of Service (Intersection) = A

HCS: Unsignalized Intersections Release 2.1d 2PM-BG.HC0 Page 1

Center For Microcomputers In Transportation
University of Florida
512 Weil Hall
Gainesville, FL 32611-2083
Ph: (904) 392-0378

Streets: (N-S) Virginia Road (E-W) San Antonio Drive
Analyst..... CHN
Date of Analysis..... 4/4/0
Other Information..... Year 2004 PM Peak Hour Background Traffic
All-way Stop-controlled Intersection

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	> 1	< 0	0	> 1	< 0	0	> 1	< 0	0	> 1	< 0
Volumes	1	165	8	25	161	46	14	10	21	43	30	3
PHF	1	1	1	1	1	1	1	1	1	1	1	1

Volume Summary and Capacity Analysis WorkSheet

	EB	WB	NB	SB
LT Flow Rate	1	25	14	43
RT Flow Rate	8	46	21	3
Approach Flow Rate	174	232	45	76
Proportion LT	0.01	0.11	0.31	0.57
Proportion RT	0.05	0.20	0.47	0.04
Opposing Approach Flow Rate	232	174	76	45
Conflicting Approaches Flow Rate	121	121	406	406
Proportion, Subject Approach Flow Rate	0.33	0.44	0.09	0.14
Proportion, Opposing Approach Flow Rate	0.44	0.33	0.14	0.09
Lanes on Subject Approach	1	1	1	1
Lanes on Opposing Approach	1	1	1	1
LT, Opposing Approach	25	1	43	14
RT, Opposing Approach	46	8	3	21
LT, Conflicting Approaches	57	57	26	26
RT, Conflicting Approaches	24	24	54	54
Proportion LT, Opposing Approach	0.11	0.01	0.57	0.31
Proportion RT, Opposing Approach	0.20	0.05	0.04	0.47
Proportion LT, Conflicting Approaches	0.47	0.47	0.06	0.06
Proportion RT, Conflicting Approaches	0.20	0.20	0.13	0.13
Approach Capacity	664	697	145	325

Intersection Performance Summary

Movement	Approach Flow Rate	Approach Capacity	V/C Ratio	Average Total Delay	LOS
EB	174	664	0.26	2.7	A
WB	232	697	0.33	3.5	A
NB	45	145	0.31	3.3	A
SB	76	325	0.23	2.4	A

Intersection Delay = 3.1
Level of Service (Intersection) = A

HCS: Unsignalized Intersections Release 2.1d 2PM-GROW.HC0 Page 1

Center For Microcomputers In Transportation
University of Florida
512 Weil Hall
Gainesville, FL 32611-2083
Ph: (904) 392-0378

Streets: (N-S) Virginia Road (E-W) San Antonio Drive
Analyst..... CHN
Date of Analysis..... 4/4/0
Other Information..... Year 2004 PM Peak Hour Traffic with Rancho "Growth"
All-way Stop-controlled Intersection

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	> 1	< 0	0	> 1	< 0	0	> 1	< 0	0	> 1	< 0
Volumes	1	165	8	25	161	47	14	10	21	55	35	4
PHF	1	1	1	1	1	1	1	1	1	1	1	1

Volume Summary and Capacity Analysis WorkSheet

	EB	WB	NB	SB
LT Flow Rate	1	25	14	55
RT Flow Rate	8	47	21	4
Approach Flow Rate	174	233	45	94
Proportion LT	0.01	0.11	0.31	0.59
Proportion RT	0.05	0.20	0.47	0.04
Opposing Approach Flow Rate	233	174	94	45
Conflicting Approaches Flow Rate	139	139	407	407
Proportion, Subject Approach Flow Rate	0.32	0.43	0.08	0.17
Proportion, Opposing Approach Flow Rate	0.43	0.32	0.17	0.08
Lanes on Subject Approach	1	1	1	1
Lanes on Opposing Approach	1	1	1	1
LT, Opposing Approach	25	1	55	14
RT, Opposing Approach	47	8	4	21
LT, Conflicting Approaches	69	69	26	26
RT, Conflicting Approaches	25	25	55	55
Proportion LT, Opposing Approach	0.11	0.01	0.59	0.31
Proportion RT, Opposing Approach	0.20	0.05	0.04	0.47
Proportion LT, Conflicting Approaches	0.50	0.50	0.06	0.06
Proportion RT, Conflicting Approaches	0.18	0.18	0.14	0.14
Approach Capacity	631	662	157	351

Intersection Performance Summary

Movement	Approach Flow Rate	Approach Capacity	V/C Ratio	Average Total Delay	LOS
EB	174	631	0.28	2.9	A
WB	233	662	0.35	3.8	A
NB	45	157	0.29	3.0	A
SB	94	351	0.27	2.8	A

Intersection Delay = 3.3
Level of Service (Intersection) = A

B-11

HCS: Unsignalized Intersections Release 2.1d 2PM-EXPA.HCO Page 1

Center For Microcomputers In Transportation
University of Florida
512 Weil Hall
Gainesville, FL 32611-2083
Ph: (904) 392-0378

Streets: (N-S) Virginia Road (E-W) San Antonio Drive
Analyst..... CHN
Date of Analysis..... 4/4/0
Other Information..... Year 2004 PM Peak Hour Traffic with Ranch "Expanstion"

All-way Stop-controlled Intersection

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	0	> 1	< 0	0	> 1	< 0	0	> 1	< 0	0	> 1	< 0
Volumes	1	165	8	25	161	47	14	10	21	55	35	4
PHF	1	1	1	1	1	1	1	1	1	1	1	1

Volume Summary and Capacity Analysis WorkSheet

	EB	WB	NB	SB
LT Flow Rate	1	25	14	55
RT Flow Rate	8	47	21	4
Approach Flow Rate	174	233	45	94
Proportion LT	0.01	0.11	0.31	0.59
Proportion RT	0.05	0.20	0.47	0.04
Opposing Approach Flow Rate	233	174	94	45
Conflicting Approaches Flow Rate	139	139	407	407
Proportion, Subject Approach Flow Rate	0.32	0.43	0.08	0.17
Proportion, Opposing Approach Flow Rate	0.43	0.32	0.17	0.08
Lanes on Subject Approach	1	1	1	1
Lanes on Opposing Approach	1	1	1	1
LT, Opposing Approach	25	1	55	14
RT, Opposing Approach	47	8	4	21
LT, Conflicting Approaches	69	69	26	26
RT, Conflicting Approaches	25	25	55	55
Proportion LT, Opposing Approach	0.11	0.01	0.59	0.31
Proportion RT, Opposing Approach	0.20	0.05	0.04	0.47
Proportion LT, Conflicting Approaches	0.50	0.50	0.06	0.06
Proportion RT, Conflicting Approaches	0.18	0.18	0.14	0.14
Approach Capacity	631	662	157	351

Intersection Performance Summary

Movement	Approach Flow Rate	Approach Capacity	V/C Ratio	Average Total Delay	LOS
EB	174	631	0.28	2.9	A
WB	233	662	0.35	3.8	A
NB	45	157	0.29	3.0	A
SB	94	351	0.27	2.8	A

Intersection Delay = 3.3
Level of Service (Intersection) = A

B-12

LINSCOTT LAW & GREENSPAN
ENGINEERS

APPENDIX C

RANCHO LOS CERRITOS HISTORIC RANCH
TRIP GENERATION CALCULATION WORKSHEETS

LINSCOTT LAW & GREENSPAN
ENGINEERS

APPENDIX C-1

EXISTING PERSON TRIP GENERATION POTENTAIL
BASED ON AVERAGE ANNUAL ATTENDANCE OVER THE PAST FOUR FISCAL YEARS[1]
Existing Rancho Los Cerritos Historic Site

	Factor	General Tours[2]	Factor	School Tours[3]	Factor	Public Event[4]	Factor	Miscellaneous Site Uses
Annual Visitors		7,150		4,250		3,530		1,480
Monthly Visitors	12 Months	596	9 Months	472	5 Events	706	12 Months	123
Peak Month Visitors	1.5	894	1.0	472	1.0	706	2.0	246
% attendance during Weekday[5]	50%	447	100%	472	0%	0	50%	123
Daily Visitors	12 Days	37	8 Days	59	1 Days	0	12 Days	10
Weekday Peak Daily Visitors	1.5	56	1.0	59	1.0	0	1.5	15

[1] Source: Rancho Los Cerritos Historic Site data. Does not include Administrative/Volunteer Functions. The trip generation potential of the Rancho Administration/Volunteers is accounted for in existing traffic data.

[2] General Tours include Special and Group Tours. General Tours of the Rancho (no appointment necessary) are available Wednesday through Sunday (1:00 PM - 5:00 PM), 52 weeks a year.

[3] School Tours are currently provided two days a week, Wednesday and Thursday, between 9:00 AM - 12:00 PM, 35 weeks a year, with approximately 70 students per morning.

[4] Public events are scheduled 14 times per year on weekends (including 5 major events), requiring closure of the Rancho to General Tours, Group Tours, etc. and use of Virginia Road for off-site parking.

[5] The percent of visitors touring the Rancho facilities during a weekday (Wednesday through Friday) is determined based on review of visitor logs kept by the Rancho Los Cerritos staff over the period of September 1999 to December 1999.

LINSCOTT LAW & GREENSPAN ENGINEERS

APPENDIX C-2

WEEKDAY VEHICLE TRIP GENERATION CALCULATIONS
BASED PEAK PERSON TRIP CALCULATIONS AND EXISTING AVERAGE ANNUAL ATTENDANCE
Existing Rancho Los Cerritos Historic Site

GENERAL TOURS			SCHOOL TOURS			PUBLIC EVENTS			MISCELLANEOUS USES		
TOTAL ATT.		56	*TOTAL ATT.*		59	*TOTAL ATT.*		0	*TOTAL ATT.*		15
PERSON TRIPS			*PERSON TRIPS*			*PERSON TRIPS*			*PERSON TRIPS*		
Ins		56	Ins		59	Ins		0	Ins		15
Out		56	Out		59	Out		0	Out		15
MODE			*MODE*			*MODE*			*MODE*		
Drive Alone	25%	14	Drive Alone	0%	0	Drive Alone	0%	0	Drive Alone	100%	15
Carpool	65%	36	Carpool	6%	4	Carpool	0%	0	Carpool	0%	0
Bus	0%	0	Bus	94%	55	Bus	0%	0	Bus	0%	0
Other/Walk	10%	6	Other/Walk	0%	0	Other/Walk	0%	0	Other/Walk	0%	0
TOTAL	100%	56	TOTAL	100%	59	TOTAL	0%	0	TOTAL	100%	15
OCCUPANCY			*OCCUPANCY*			*OCCUPANCY*			*OCCUPANCY*		
Drive Alone	1.0	14	Drive Alone	1.0	0	Drive Alone	1.0	0	Drive Alone	1.0	15
Carpool	2.6	14	Carpool	2.6	2	Carpool	2.6	0	Carpool	2.6	0
Bus	40	0	Bus	40	1	Bus	40	0	Bus	40	0
Other/Walk	0	0	Other/Walk	0	0	Other/Walk	0	0	Other/Walk	0	0
Total Vehicles		28	Total Vehicles		3	Total Vehicles		0	Total Vehicles		15
PCE Conversion			*PCE Conversion*			*PCE Conversion*			*PCE Conversion*		
Car	1.0	28	Car	1.0	2	Car	1.0	0	Car	1.0	15
Bus	2.0	0	Bus	2.0	2	Bus	2.0	0	Bus	2.0	0
Total PCE		28	Total PCE		4	Total PCE		0	Total PCE		15
DAILY PCE			*DAILY PCE*			*DAILY PCE*			*DAILY PCE*		
Ins		**28**	**Ins**		**4**	**Ins**		**0**	**Ins**		**15**
Out		**28**	**Out**		**4**	**Out**		**0**	**Out**		**15**
Total		**56**	**Total**		**8**	**Total**		**0**	**Total**		**30**

LINSCOTT LAW & GREENSPAN
ENGINEERS

APPENDIX C-3

WEEKDAY PROJECT TRIP ARRIVAL AND DEPARTURE CALCULATIONS
Rancho Los Cerritos Historic Site

GENERAL TOURS			SCHOOL TOURS			PUBLIC EVENTS			MISCELLANEOUS USES			
ARRIVALS			*ARRIVALS*			*ARRIVALS*			*ARRIVALS*			TOTAL
Time	Percent of Demand	Number of Vehicles	Time	Percent of Demand	Number of Vehicles	Time	Percent of Demand	Number of Vehicles	Time	Percent of Demand	Number of Vehicles	HOURLY ARRIVALS
6:00 AM	0%	0	6:00 AM	0%	0	6:00 AM	0%	0	6:00 AM	0%	0	0
7:00 AM	0%	0	7:00 AM	0%	0	7:00 AM	0%	0	7:00 AM	0%	0	0
8:00 AM	0%	0	8:00 AM	0%	0	8:00 AM	0%	0	8:00 AM	0%	0	0
9:00 AM	0%	0	9:00 AM	100%	4	9:00 AM	0%	0	9:00 AM	15%	2	6
10:00 AM	0%	0	10:00 AM	0%	0	10:00 AM	0%	0	10:00 AM	45%	7	7
11:00 AM	0%	0	11:00 AM	0%	0	11:00 AM	0%	0	11:00 AM	30%	5	5
12:00 PM	5%	1	12:00 PM	0%	0	12:00 PM	0%	0	12:00 PM	10%	2	3
1:00 PM	25%	7	1:00 PM	0%	0	1:00 PM	0%	0	1:00 PM	0%	0	7
2:00 PM	40%	11	2:00 PM	0%	0	2:00 PM	0%	0	2:00 PM	0%	0	11
3:00 PM	25%	7	3:00 PM	0%	0	3:00 PM	0%	0	3:00 PM	0%	0	7
4:00 PM	5%	1	4:00 PM	0%	0	4:00 PM	0%	0	4:00 PM	0%	0	1
5:00 PM	0%	0	5:00 PM	0%	0	5:00 PM	0%	0	5:00 PM	0%	0	0
6:00 PM	0%	0	6:00 PM	0%	0	6:00 PM	0%	0	6:00 PM	0%	0	0
7:00 PM	0%	0	7:00 PM	0%	0	7:00 PM	0%	0	7:00 PM	0%	0	0
8:00 PM	0%	0	8:00 PM	0%	0	8:00 PM	0%	0	8:00 PM	0%	0	0
9:00 PM	0%	0	9:00 PM	0%	0	9:00 PM	0%	0	9:00 PM	0%	0	0
10:00 PM	0%	0	10:00 PM	0%	0	10:00 PM	0%	0	10:00 PM	0%	0	0
11:00 PM	0%	0	11:00 PM	0%	0	11:00 PM	0%	0	11:00 PM	0%	0	0
TOTAL	100%	27	TOTAL	100%	4	TOTAL	0%	0	TOTAL	100%	16	47
DEPARTURES			*DEPARTURES*			*DEPARTURES*			*DEPARTURES*			TOTAL
Time	Percent of Demand	Number of Vehicles	Time	Percent of Demand	Number of Vehicles	Time	Percent of Demand	Number of Vehicles	Time	Percent of Demand	Number of Vehicles	HOURLY DEPART.
6:00 AM	0%	0	6:00 AM	0%	0	6:00 AM	0%	0	6:00 AM	0%	0	0
7:00 AM	0%	0	7:00 AM	0%	0	7:00 AM	0%	0	7:00 AM	0%	0	0
8:00 AM	0%	0	8:00 AM	0%	0	8:00 AM	0%	0	8:00 AM	0%	0	0
9:00 AM	0%	0	9:00 AM	0%	0	9:00 AM	0%	0	9:00 AM	0%	0	0
10:00 AM	0%	0	10:00 AM	0%	0	10:00 AM	0%	0	10:00 AM	5%	1	1
11:00 AM	0%	0	11:00 AM	0%	0	11:00 AM	0%	0	11:00 AM	15%	2	2
12:00 PM	0%	0	12:00 PM	100%	4	12:00 PM	0%	0	12:00 PM	35%	5	9
1:00 PM	0%	0	1:00 PM	0%	0	1:00 PM	0%	0	1:00 PM	45%	7	7
2:00 PM	10%	3	2:00 PM	0%	0	2:00 PM	0%	0	2:00 PM	0%	0	3
3:00 PM	25%	7	3:00 PM	0%	0	3:00 PM	0%	0	3:00 PM	0%	0	7
4:00 PM	50%	14	4:00 PM	0%	0	4:00 PM	0%	0	4:00 PM	0%	0	14
5:00 PM	15%	4	5:00 PM	0%	0	5:00 PM	0%	0	5:00 PM	0%	0	4
6:00 PM	0%	0	6:00 PM	0%	0	6:00 PM	0%	0	6:00 PM	0%	0	0
7:00 PM	0%	0	7:00 PM	0%	0	7:00 PM	0%	0	7:00 PM	0%	0	0
8:00 PM	0%	0	8:00 PM	0%	0	8:00 PM	0%	0	8:00 PM	0%	0	0
9:00 PM	0%	0	9:00 PM	0%	0	9:00 PM	0%	0	9:00 PM	0%	0	0
10:00 PM	0%	0	10:00 PM	0%	0	10:00 PM	0%	0	10:00 PM	0%	0	0
11:00 PM	0%	0	11:00 PM	0%	0	11:00 PM	0%	0	11:00 PM	0%	0	0
TOTAL	100%	28	TOTAL	100%	4	TOTAL	0%	0	TOTAL	100%	15	47

LINSCOTT LAW & GREENSPAN
ENGINEERS

APPENDIX C-4

POTENTIAL PERSON TRIP GENERATION INCREASE DUE TO RANCHO LOS CERRITOS PROJECT BASED ON ANNUAL ATTENDANCE[1]

Rancho Los Cerritos Historic Site

	Factor	General Tours[2]	Factor	School Tours[3]	Factor	Public Event[4]	Factor	Miscellaneous Site Uses
Annual Visitors		7,150		4,250		3,530		1,480
Monthly Visitors	12 Months	596	9 Months	472	5 Events	706	12 Months	123
Peak Month Visitors	1.5	894	1.0	472	1.0	706	2.0	246
% attendance during Weekday[5]	50%	447	100%	472	0%	0	50%	123
Daily Visitors	12 Days	37	8 Days	59	1 Days	0	12 Days	10
Weekday Peak Daily Visitors	1.5	56	1.0	59	1.0	0	1.5	15

[1] Source: Rancho Los Cerritos Historic Site data. Does not include Administrative/Volunteer Functions. The trip generation potential of the Rancho Administration/Volunteers is accounted for in existing traffic data.

[2] General Tours include Special and Group Tours. General Tours of the Rancho (no appointment necessary) are available Wednesday through Sunday (1:00 PM - 5:00 PM), 52 weeks a year.

[3] School Tours are currently provided two days a week, Wednesday and Thursday, between 9:00 AM - 12:00 PM, 35 weeks a year, with approximately 70 students per morning.

[4] Public events are scheduled 14 times per year on weekends (including 5 major events), requiring closure of the Rancho to General Tours, Group Tours, etc. and use of Virginia Road for off-site parking.

[5] The percent of visitors touring the Rancho facilities during a weekday (Wednesday through Friday) is determined based on review of visitor logs kept by the Rancho Los Cerritos staff over the period of September 1999 to December 1999.

LINSCOTT LAW & GREENSPAN
ENGINEERS

APPENDIX C-5

WEEKDAY VEHICLE TRIP GENERATION CALCULATIONS
BASED PEAK PERSON TRIP CALCULATIONS
Rancho Los Cerritos Historic Site

GENERAL TOURS			SCHOOL TOURS			PUBLIC EVENTS			MISCELLANEOUS USES		
TOTAL ATT.		56	*TOTAL ATT.*		59	*TOTAL ATT.*		0	*TOTAL ATT.*		15
PERSON TRIPS			*PERSON TRIPS*			*PERSON TRIPS*			*PERSON TRIPS*		
Ins		56	Ins		59	Ins		0	Ins		15
Out		56	Out		59	Out		0	Out		15
MODE			*MODE*			*MODE*			*MODE*		
Drive Alone	25%	14	Drive Alone	0%	0	Drive Alone	0%	0	Drive Alone	100%	15
Carpool	65%	36	Carpool	6%	4	Carpool	0%	0	Carpool	0%	0
Bus	0%	0	Bus	94%	55	Bus	0%	0	Bus	0%	0
Other/Walk	10%	6	Other/Walk	0%	0	Other/Walk	0%	0	Other/Walk	0%	0
TOTAL	100%	56	TOTAL	100%	59	TOTAL	0%	0	TOTAL	100%	15
OCCUPANCY			*OCCUPANCY*			*OCCUPANCY*			*OCCUPANCY*		
Drive Alone	1.0	14	Drive Alone	1.0	0	Drive Alone	1.0	0	Drive Alone	1.0	15
Carpool	2.6	14	Carpool	2.6	2	Carpool	2.6	0	Carpool	2.6	0
Bus	40	0	Bus	40	1	Bus	40	0	Bus	40	0
Other/Walk	0	0	Other/Walk	0	0	Other/Walk	0	0	Other/Walk	0	0
Total Vehicles		28	Total Vehicles		3	Total Vehicles		0	Total Vehicles		15
PCE Conversion			*PCE Conversion*			*PCE Conversion*			*PCE Conversion*		
Car	1.0	28	Car	1.0	2	Car	1.0	0	Car	1.0	15
Bus	2.0	0	Bus	2.0	2	Bus	2.0	0	Bus	2.0	0
Total PCE		28	Total PCE		4	Total PCE		0	Total PCE		15
DAILY PCE			*DAILY PCE*			*DAILY PCE*			*DAILY PCE*		
Ins		**28**	**Ins**		**4**	**Ins**		**0**	**Ins**		**15**
Out		**28**	**Out**		**4**	**Out**		**0**	**Out**		**15**
Total		**56**	**Total**		**8**	**Total**		**0**	**Total**		**30**

LINSCOTT LAW & GREENSPAN
ENGINEERS

APPENDIX C-6

WEEKDAY PROJECT TRIP ARRIVAL AND DEPARTURE CALCULATIONS
Rancho Los Cerritos Historic Site

GENERAL TOURS			SCHOOL TOURS			PUBLIC EVENTS			MISCELLANEOUS USES			TOTAL
ARRIVALS			*ARRIVALS*			*ARRIVALS*			*ARRIVALS*			HOURLY
Time	Percent of Demand	Number of Vehicles	Time	Percent of Demand	Number of Vehicles	Time	Percent of Demand	Number of Vehicles	Time	Percent of Demand	Number of Vehicles	ARRIVALS
6:00 AM	0%	0	6:00 AM	0%	0	6:00 AM	0%	0	6:00 AM	0%	0	0
7:00 AM	0%	0	7:00 AM	0%	0	7:00 AM	0%	0	7:00 AM	0%	0	0
8:00 AM	0%	0	8:00 AM	0%	0	8:00 AM	0%	0	8:00 AM	0%	0	0
9:00 AM	0%	0	9:00 AM	100%	4	9:00 AM	0%	0	9:00 AM	15%	2	6
10:00 AM	0%	0	10:00 AM	0%	0	10:00 AM	0%	0	10:00 AM	45%	7	7
11:00 AM	0%	0	11:00 AM	0%	0	11:00 AM	0%	0	11:00 AM	30%	5	5
12:00 PM	5%	1	12:00 PM	0%	0	12:00 PM	0%	0	12:00 PM	10%	2	3
1:00 PM	25%	7	1:00 PM	0%	0	1:00 PM	0%	0	1:00 PM	0%	0	7
2:00 PM	40%	11	2:00 PM	0%	0	2:00 PM	0%	0	2:00 PM	0%	0	11
3:00 PM	25%	7	3:00 PM	0%	0	3:00 PM	0%	0	3:00 PM	0%	0	7
4:00 PM	5%	1	4:00 PM	0%	0	4:00 PM	0%	0	4:00 PM	0%	0	1
5:00 PM	0%	0	5:00 PM	0%	0	5:00 PM	0%	0	5:00 PM	0%	0	0
6:00 PM	0%	0	6:00 PM	0%	0	6:00 PM	0%	0	6:00 PM	0%	0	0
7:00 PM	0%	0	7:00 PM	0%	0	7:00 PM	0%	0	7:00 PM	0%	0	0
8:00 PM	0%	0	8:00 PM	0%	0	8:00 PM	0%	0	8:00 PM	0%	0	0
9:00 PM	0%	0	9:00 PM	0%	0	9:00 PM	0%	0	9:00 PM	0%	0	0
10:00 PM	0%	0	10:00 PM	0%	0	10:00 PM	0%	0	10:00 PM	0%	0	0
11:00 PM	0%	0	11:00 PM	0%	0	11:00 PM	0%	0	11:00 PM	0%	0	0
TOTAL	100%	27	TOTAL	100%	4	TOTAL	0%	0	TOTAL	100%	16	47
DEPARTURES			*DEPARTURES*			*DEPARTURES*			*DEPARTURES*			TOTAL
Time	Percent of Demand	Number of Vehicles	Time	Percent of Demand	Number of Vehicles	Time	Percent of Demand	Number of Vehicles	Time	Percent of Demand	Number of Vehicles	HOURLY DEPART.
6:00 AM	0%	0	6:00 AM	0%	0	6:00 AM	0%	0	6:00 AM	0%	0	0
7:00 AM	0%	0	7:00 AM	0%	0	7:00 AM	0%	0	7:00 AM	0%	0	0
8:00 AM	0%	0	8:00 AM	0%	0	8:00 AM	0%	0	8:00 AM	0%	0	0
9:00 AM	0%	0	9:00 AM	0%	0	9:00 AM	0%	0	9:00 AM	0%	0	0
10:00 AM	0%	0	10:00 AM	0%	0	10:00 AM	0%	0	10:00 AM	5%	1	1
11:00 AM	0%	0	11:00 AM	0%	0	11:00 AM	0%	0	11:00 AM	15%	2	2
12:00 PM	0%	0	12:00 PM	100%	4	12:00 PM	0%	0	12:00 PM	35%	5	9
1:00 PM	0%	0	1:00 PM	0%	0	1:00 PM	0%	0	1:00 PM	45%	7	7
2:00 PM	10%	3	2:00 PM	0%	0	2:00 PM	0%	0	2:00 PM	0%	0	3
3:00 PM	25%	7	3:00 PM	0%	0	3:00 PM	0%	0	3:00 PM	0%	0	7
4:00 PM	50%	14	4:00 PM	0%	0	4:00 PM	0%	0	4:00 PM	0%	0	14
5:00 PM	15%	4	5:00 PM	0%	0	5:00 PM	0%	0	5:00 PM	0%	0	4
6:00 PM	0%	0	6:00 PM	0%	0	6:00 PM	0%	0	6:00 PM	0%	0	0
7:00 PM	0%	0	7:00 PM	0%	0	7:00 PM	0%	0	7:00 PM	0%	0	0
8:00 PM	0%	0	8:00 PM	0%	0	8:00 PM	0%	0	8:00 PM	0%	0	0
9:00 PM	0%	0	9:00 PM	0%	0	9:00 PM	0%	0	9:00 PM	0%	0	0
10:00 PM	0%	0	10:00 PM	0%	0	10:00 PM	0%	0	10:00 PM	0%	0	0
11:00 PM	0%	0	11:00 PM	0%	0	11:00 PM	0%	0	11:00 PM	0%	0	0
TOTAL	100%	28	TOTAL	100%	4	TOTAL	0%	0	TOTAL	100%	15	47

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APPENDIX D

RANCHO LOS CERRITOS HISTORIC RANCH
MASTER PLAN PHASING AND PARKING MANAGEMENT PLAN



Section 4 - Master Plan Recommendations

C. Fire Protection

It is recommended that all of the buildings contain fire sensors, smoke detectors and fire sprinklers. The fire sprinkling system will provide maximum protection of both the building and site. The heads can be a pop-down recessed type, with water flow determined by heat sensors. Due to the large attic spaces and deep floor joists, a sprinkler system could be installed with minimum impact to the ranch's historical character. All new buildings will need to be fire sprinklered.

The existing standpipe will need to be replaced with a new fire hydrant to meet current City of Long Beach specifications.

D. Graffiti

Graffiti has been a minor problem at Rancho Los Cerritos. Should graffiti occur, *Preservation Brief 38: Removing Graffiti from Historic Masonry* should be reviewed.

4.5 Parking and Circulation

4.5.1 Site Usage

The site is used by drop-in visitors, scheduled tours, school programs, special events, volunteer committee work and other miscellaneous uses. Approximately 17,000 visits are made annually. It is recommended that no more than 35,000 visits are made on an annual basis to help protect the Rancho from abuse. The typical afternoon use varies from five to 75 visitors with the greatest numbers occurring on the weekend. Lectures and workshops attract 20-60 visitors, usually coming in small groups. Large events, normally in the afternoon, attract 400-750 visitors. These visitors park along Virginia Road and walk into the site. The Rancho normally provides assistance on those days. Events and programs that generate a high parking demand will need to rely on the management to utilize shared ride strategies such as shuttles, valet services, and on-street parking.

Two mornings a week the Rancho hosts 70 school children (combining two classes) who usually arrive in one school bus with some walking from the bus stop on Long Beach Boulevard and San Antonio Drive. Occasionally, private schools drive their students to the site.

4.5.2 Site Circulation

To enhance historical authenticity and improve visitor traffic, public parking should be limited to the historic 1930 forecourt built by Llewelyn Bixby, Sr. for guest parking. An exception will be the addition of four non-historic accessible spaces adjacent to the new Visitor Center. The parking status quo will be maintained during events, with overflow parking taking place on Virginia Road. Low interpretive signage and benches will be provided along the 1930 driveway to help prepare visitors for their "journey to the past." In addition, Rancho staff will seek funding for shuttles and off-site parking during large-scale events.

To provide for the much-needed Visitor Center (a reconstruction of the 1830s Cota adobe), the removal of the parking lot installed by the City of Long Beach in the late 1950s is required. Removal of this lot is also necessary to avoid cars driving through the pedestrian pathways, and to open vistas to both the reconstructed Cota adobe and to the 1844 ranch house. However, buses and cars will be able to drop visitors off near the entry, then park on Virginia Road. Eight additional parking spaces will be added near the maintenance area for staff use, and will not be visible to the public.

4.5.3 Parking Recommendation

The site currently parks 29 automobiles, spread between two parking areas. The recommended plan will park 24 automobiles inclusive of four accessible spaces. While this minimum loss of parking spaces is less than ideal, public workshop comments and review by the Master Plan Advisory Committee resulted in no acceptable on-site parking alternatives. The parking allowance is also driven by security needs, the need to create four new accessible spaces, aesthetic improvements, historical authenticity and a desire to preserve remaining views and the rural character of the site.

4.6 Implementation

4.6.1 Phasing

The Master Plan outlines a series of improvements to be made to Rancho Los Cerritos for the next 25 years. If all of the financial resources were available, the ideal approach would be to improve the Rancho at once. However, due to funding limitations, both for capital improvements, maintenance and operations, a phased development is proposed.

Normally, the best formula for phasing is to build specific parts of the Master Plan throughout, and not concentrate on one area only. The priority should be placed on orienting the visitor to the Rancho.

The phasing proposed for Rancho Los Cerritos is recommended in three phases. Refer to Appendices for detailed estimates and phasing. The general sequence is summarized as follows:

A. Phase 1 (1999 - 2004)

1. Install an eight foot high perimeter black vinyl chain link fence to be hidden by landscaping. The landscaping would provide visual screening from the neighbors. Plant new landscaping along the chain link perimeter fencing.
2. Install a new fire hydrant on-site and fire alarm system within the historic adobe.
3. Install an adequate security system for the interior of the Ranch House.
4. Provide off-site directional signage to the Rancho.
5. Implement seismic rehabilitation of the Rancho. Special care should be taken to plan the seismic retrofit around the future interpretive program improvements to the Rancho.
6. Implement seismic retrofit of the trash incinerator.
7. Restore inner courtyard area.
8. Demolish fountain and tiled "hacienda" courtyard.

Section 4 - Master Plan Recommendations

B. Phase 2 (2005 - 2014)

1. Construct new entrance gate, fencing, mailbox, community refuse shelter and paving at Virginia Road entry.
2. Construct new Visitor Center and attached restroom facilities (Cota adobe).
3. Reconfigure parking/forecourt for visitor's parking. Relocate refuse shelter to southeast section of visitor's parking.
4. Construct Caretaker's residence
5. Construct new parking and driveway and gate control on site.
6. Construct new interpretive signage along entrance roadway adjacent to the arroyo.
7. Install a site perimeter security system and expand the security system to the new structures.
8. Provide temporary parking area for staff at the rear maintenance yard.
9. Begin limited upgrade for compliance to ADA issues of accessibility for the adobe. Special attention should be made to meeting ADA requirements at the north wing.
10. Improve accessibility throughout the site
11. Plant the orchard garden.
12. Improve landscaping in the arroyo.
13. Plant the areas outside the two brick courtyard walls on the Virginia Country Club side.
14. Repair of the brick wall around the garden.
15. Rehabilitate the present Visitor Center (gift shop/garage) for classroom use.
16. Restore the interior of the east wing and north wing kitchens.
17. Continue maintenance throughout the site.
18. Install new ADA lift at the classroom area for access to the verandahs and Ranch House.
19. Restore the interior of the adobe for the new interpretive program.

C. Phase 3 (2015 - 2024)

1. Provide Historic American Building Survey drawings for Cornell's hedge and lawn area to the north of the servant's quarters.
2. Demolish Cornell's hedge and lawn area, concrete parking pad and other features north of the Rancho.
3. Demolish existing herb garden.
4. Construct new barn complex consisting of staff offices, library, archives, collection, meeting area and restrooms.
5. Demolish the 1980s restroom facilities.
6. Construct new toilet building adjacent to 1930s Gardener's House.
7. Reconstruct Cornell's garden design to the south of the lawn area.
8. Reconstruct new barnyard for special events including fencing, ramada, horno, and other associated features.
9. Construct new staff parking near maintenance yard.
10. Construct workshop/gardener's storage structure.

11. Construct California native garden and herb planting area.
12. Installation of additional landscaping and irrigation associated with Phase 3 improvements.
13. Relocate trypot to the cutting garden in the backyard
14. Complete accessibility program to compliment the interpretative program both inside the Rancho and throughout the site.
15. Complete exterior improvements of the hardscape areas associated with Phase 3 improvements (paving, site furnishings, barnyard activity area, adobe walls, corrals, gates, site drainage system)
16. Restore the interior of the Rancho for the new interpretive program.
17. Restore the workshop room, temporary archives, library, upstair office areas and north wing of office areas once the new barn facilities are constructed.
18. Restore and reconstruct the water tower.
19. Improve the area around the seismic monitor structure.
20. Address any necessary modifications to the earlier seismic retrofit work.
21. Update security system.
22. Continue maintenance throughout the site.

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APPENDIX E

PARKING DEMAND ANALSYSI FOR SPECIAL PUBLIC EVENTS

LINSCOTT, LAW & GREENSPAN
ENGINEERS

ENGINEERS & PLANNERS ▪ TRAFFIC, TRANSPORTATION, PARKING

1580 Corporate Drive, Suite 122 ▪ Costa Mesa, California 92626
Phone: 714 641-1587 ▪ Fax: 714 641-0139

December 8, 2000

Ms. Ellen Calomiris, Historic Sites Officer
RANCHO LOS CERRITOS HISTORIC SITE
A State and National Historic Landmark
4600 Virginia Road
Long Beach, CA 90807

Subject: **PARKING DEMAND ANALYSIS FOR SPECIAL PUBLIC EVENTS**
RANCHO LOS CERRITOS HISTORIC RANCH SITE
MASTER PLAN IMPLEMENTATION
Long Beach, California

Dear Ms. Calomiris:

As requested, Linscott, Law & Greenspan, Engineers (LLG) is pleased to submit this Parking Demand Analysis for the Special Public Events scheduled at the Rancho Los Cerritos Historic Ranch site in the City of Long Beach. The purpose of the parking study is to determine the number of spaces needed to support the parking demand of event attendees/visitors and staff/volunteers of the various events scheduled throughout the calendar year at the Rancho.

This special events parking analysis is based on our evaluation of the Rancho's current operations, anticipated event attendance figures, estimated average vehicle occupancy figures, and number of staff and volunteers required at each event. Our method of analysis, findings and conclusions are described below.

SUMMARY OF FINDINGS AND CONCLUSIONS

Briefly, we conclude that the Rancho's 34 on-site parking spaces and the 126 unmarked parking spaces available along Virginia Road will be sufficient to meet the parking demands of the New Citizens Welcome, Summer Concert Series, Christmas Candlelight Tours, and the Foundation Fundraiser, without requiring Rancho staff and event volunteers to park at off-site parking lots.

Philip M. Linscott, P.E. (Ret.)
Jack M. Greenspan, P.E.
William A. Law, P.E. (Ret.)
Paul W. Wilkinson, P.E.
John P. Keating, P.E.
David S. Shender, P.E.

Pasadena - 626 796-2322 ▪ San Diego - 619 299-3090 ▪ Las Vegas - 702 451-1920 ▪ An LG2WB Company

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During the Restoration Fair, Antiques Appraisal Affaire, and the Christmas Open House "on-site" parking is sufficient to meet the parking demand of event attendees, but not Rancho staff and event volunteers. They will be required to park at an off-site parking lot. We understand that on these occasions, a volunteer will utilize his or her van to shuttle Rancho Los Cerritos staff and event volunteers to and from the Rancho and the off-site lot.

The lone special event that will require visitors, Rancho staff and/or event volunteers to park off-site is Mud Mania. The parking demand for this special event totals 266 parking spaces. Alone, the parking demand for event visitors totals 188 spaces (28 spaces more than the available "on-site" supply of 160).

Hence, during the Mud Mania event, Rancho Los Cerritos will have to make arrangements with a shuttle service to ferry visitors back and forth between the Rancho and off-site parking areas. To eliminate the need for use of a shuttle service during Mud Mania, the maximum attendance for this special event would have to be restricted to 600 persons.

RANCHO LOS CERRITOS SPECIAL PUBLIC EVENTS CHARACTERISTICS

Generally, fourteen (14) public events are scheduled annually at the Rancho Los Cerritos Historic Ranch. The events are usually held on either a Saturday or Sunday, except for concerts, which are held evenings during a weekday. Such events include lectures, workshops, summer concerts, the New Citizens Welcome, etc. Lectures and workshops typically attract 20-50 people, and summer concerts and the New Citizens Welcome attract between 100-250 visitors. Major events, such as Mud Mania or the Christmas Open House, attract between 300-500 persons. During these events, all other activities (i.e. general/group tours) are closed.

Four (4) large-scale events that are scheduled annually at the Rancho include the following:

- Restoration Fair: Saturday, 12:30 PM – 4:30 PM (this event may be alternated with similar events once every three years)
- Mud Mania: Sunday, 12:30 PM – 4:30 PM
- Christmas Open House: Sunday, 1:00 PM –4:00 PM
- Friends, Neighbors and Holiday Fare, Friday & Saturday, 6:30 PM – 9:30 PM (2 day event)

Mid-size events attracting between 100 and 250 people per event that are also scheduled annually at the Rancho include the following:

- New Citizens Welcome: Saturday 11:30 AM – 1:30 PM
- Summer Concert Series: Summer Weekday Evenings, 5:00 PM – 7:30 PM (once during June, July and August)
- Antique Appraisal Affaire: Saturday, 10:00 AM – 2:00 PM

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Another mid-size event, which is currently in the planning stages, is the Foundation Fundraiser. This special event will likely be a weekend (Saturday) evening affair scheduled in the Spring, starting in the Year 2001 and may recur annually or bi-annually. The estimated attendance at this fundraiser is expected to range between 250 and 300 persons. The maximum attendance for the March 2001 Foundation Fundraiser event will be capped at 200 guests.

The focus of the parking analysis is to identify the parking requirements of these four (4) mid-size and four (4) large-scale events. **Table 1** provides a summary of the Special Public Events schedule, current and projected attendance figures, frequency of the event, the time of year the event is held, and each event's hours of operation.

RANCHO LOS CERRITOS HISTORIC RANCH PARKING SUPPLY

The Rancho Los Cerritos Historic Ranch currently provides 34 parking spaces for use by employees, visitors, tour attendees and docents. However, during large-scale and mid-size special events at the Rancho, the on-site parking lot is used primarily for event attendees and disabled/handicapped persons parking. Rancho Los Cerritos staff and event volunteers park their vehicles off-site, with a volunteer providing shuttle service back and forth in his or her van. The off-site parking lot utilized previously by the Rancho was located approximately ¾ of a mile from the Rancho Los Cerritos site at the intersection of San Antonio Drive and Long Beach Boulevard.

In addition to the Rancho's on-site parking lot, unmarked curbside spaces along Virginia Road are utilized for event attendee parking. Approximately 126 "overflow" curbside parking spaces on Virginia Road are available; 36 are located north of the Virginia Country Club Driveway and 90 south of the Virginia Country Club Driveway to the Country Club Drive/Virginia Road intersection. The use of curbside spaces on Virginia Road for mid-size and large-scale, daytime public events is a current parking management plan by the Rancho to ensure that sufficient parking supply is provided for all event attendees. The addition of 126 unmarked curbside spaces to the 34 parking spaces currently provided at the Rancho results in a total special event parking supply of 160 spaces. Please note that implementation of the Rancho Los Cerritos Master Plan will reduce the on-site parking supply by 10 spaces to 24 parking spaces.

A description of the current Parking Management Plan utilized by Rancho Los Cerritos can be found attached in **Appendix A**. We understand that organizations that occasionally utilize the Rancho for their special events have sometimes obtained permission from the Virginia Country Club to utilize the country club's parking lot. It is our understanding that the Rancho may seek similar arrangements with the Virginia Country Club for the Rancho's special evening events, provided they are not in conflict with country club events.

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SPECIAL EVENTS PARKING DEMAND PROJECTIONS

Parking demand for mid-size and large-scale public events schedules at the Rancho Los Cerritos Historic Ranch was estimated by studying the operating schedule of each Rancho event, anticipated event attendance figures, estimated average vehicle occupancy figures, and number of staff and volunteers required at each event.

The projected peak parking demands for each of the scheduled special events was estimated in a manner similar to forecasting the trip generation of the Rancho during a typical weekday and weekend day. By using event attendance, staffing and volunteer figures, and each events operating schedule, the number of person trips associated with each event was derived, which were then translated to number of vehicles or parking spaces by applying parking demand ratios specific to each person trip category, and consequently parking space estimates.

Table 2 summarizes the results of the parking demand analysis prepared for the four (4) mid-size and four (4) large-scale public events held at the Rancho Los Cerritos Historic Ranch. Columns (1) and (2) of Table 2 present the name of the special event, event schedule, and approximate time of peak on-site accumulation (when a majority of the tour attendees are on-site at the same time). Columns (3) and (4) present the maximum event attendance and the estimated average vehicle occupancy of each event as observed by Rancho Los Cerritos staff. Columns (5) and (6) present the staffing and volunteer support for each event. Column (7) presents the parking demand ratios utilized to estimate the parking needs for event attendees and staff/volunteer support. To provide a conservative forecast, we have assumed that each staff member and event volunteer would require a parking space. Columns (8), (9) and (10) present the individual parking spaces requirements for event attendees and staff/volunteers, and each event's total parking demand.

Review of Table 2 shows that the 160 parking spaces available for use by Rancho Los Cerritos will be able to support four (4) of the eight (8) special public events scheduled at the Rancho.

The New Citizens Welcome, Summer Concert Series (3 days), Antiques Appraisal Affaire, and Christmas Candlelight Tours (2 days) will each allow the Rancho to implement their current parking management program without requiring Rancho staff and event volunteers to park off-site. The projected parking demand for each of these special public events totals 116 spaces, 86 spaces, 88 spaces, and 76 spaces, respectively.

With regards to the remaining four special public events held annually at the Rancho, the "on-site" event parking supply of 160 spaces will be sufficient to meet the parking demand of only the event attendees. During the Restoration Fair, the Christmas Open House, and Foundation Fund Raiser, Rancho staff and event volunteers will be required to park at an off-site parking lot. We understand that it is likely that the Rancho will employ a valet service during the planned

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Foundation Fundraiser and will seek the permission of the Virginia Country Club to utilize their parking lot for this future evening event.

The one special event that will require off-site parking for both event attendees and Rancho staff and volunteers is Mud Mania. With a maximum event attendance of 750 persons, Rancho staff of 8, and volunteer support totaling 70, we project that 266 parking spaces will be required. Parking for event attendees alone is projected to total 188 parking spaces, which is 28 spaces in excess of the available "on-site" supply of 160. The combined parking demand for Rancho staff and Mud Mania event volunteers totals 78 spaces.

Hence, to accommodate the projected parking demand for the Mud Mania event, off-site parking lot(s) with a total of 100 spaces will be needed. This will require Rancho Los Cerritos to park visitors at off-site lots and make arrangements with a shuttle service to transfer visitors to and from the Rancho.

It is our understanding that Rancho Los Cerritos in the past had made such arrangements with the YMCA for the New Citizens Welcome special event. On this occasion, the YMCA utilized their vans and drivers to provide continuous shuttle service beginning a half-hour before the New Citizens Welcome special event and continuing until an hour after the event ended.

It is recommended that Rancho Los Cerritos explore the possibility of using a shuttle service or bus company to transport Mud Mania visitors from off-site parking lots to the Rancho during this special event.

As an option to providing shuttle service, the maximum attendance for the Mud Mania Special Event would have to be restricted to 600 persons. If restricted to 600 attendees, only Rancho staff and event volunteers would be required to park at an off-site parking; the parking demand for event visitors can be accommodated by the "on-site" parking supply of 160 spaces.

RECOMMENDATIONS

We recommend that Rancho Los Cerritos and/or the City of Long Beach Department of Parks, Recreation and Marine investigate what off-site parking lots are available for their use during special public events and enter into an agreement with the property owner to ensure that parking "intrusion" in the adjacent residential neighborhood(s) is kept to a minimum.

In addition, we recommend that Rancho Los Cerritos and/or the City of Long Beach Department of Parks, Recreation and Marine investigate the possibility of acquiring property in the immediate vicinity for additional parking for the Rancho, especially during Special Events.

* * * * * * * * * * * *

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We appreciate the opportunity to prepare this analysis for the Rancho Los Cerritos Historic Rancho. Should you have any questions or need additional assistance, please do not hesitate to call me at (714) 641-1587.

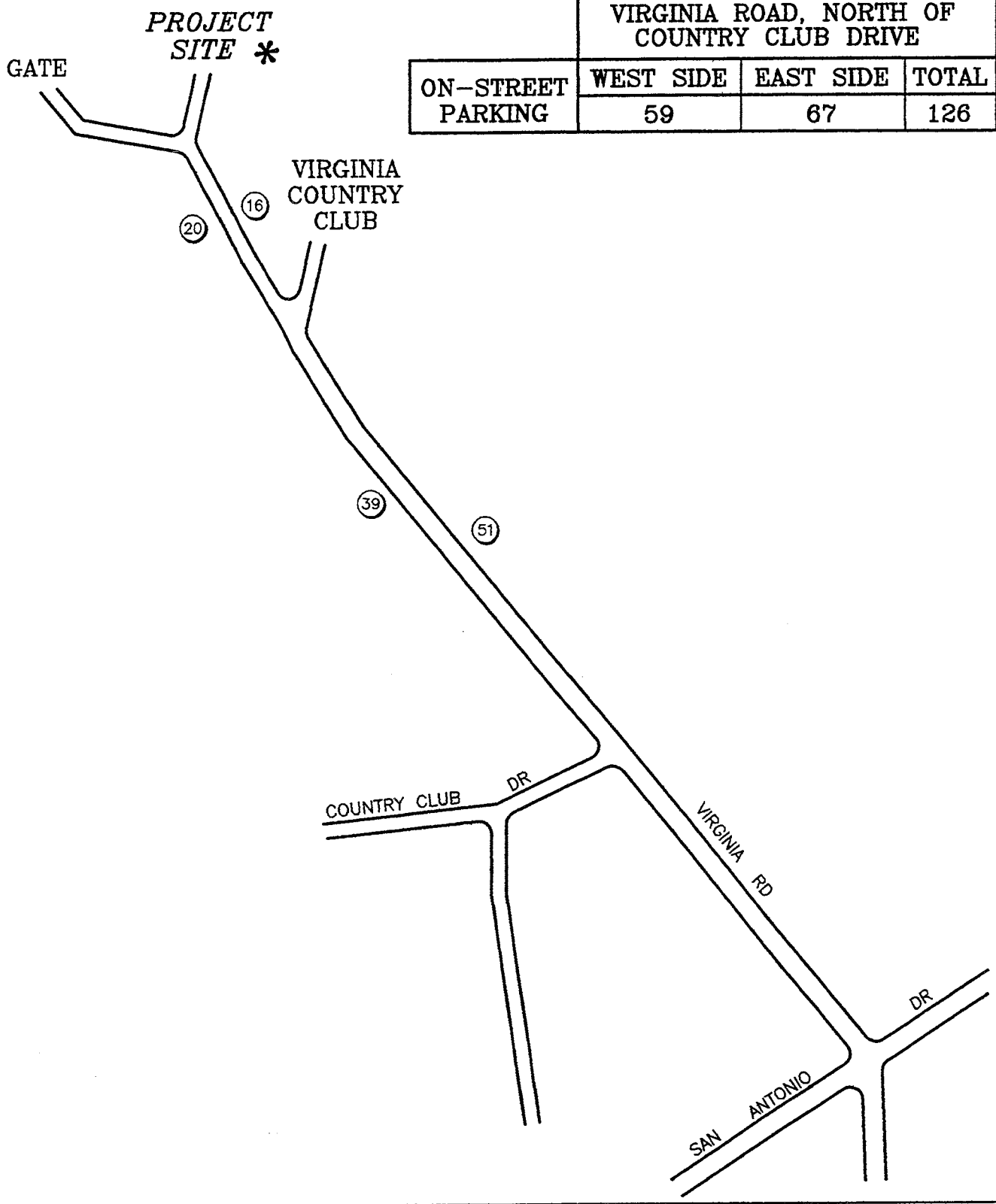
Very truly yours,
LINSCOTT, LAW & GREENSPAN, ENGINEERS

Richard E. Barretto, P.E.
Associate Principal

Attachments

2992082 Special Events Parking Demand Study.doc

	VIRGINIA ROAD, NORTH OF COUNTRY CLUB DRIVE		
ON-STREET PARKING	WEST SIDE	EAST SIDE	TOTAL
	59	67	126



N NO SCALE

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KEY

(#) = APPROXIMATE NUMBER OF ON-STREET PARKING SPACES (CALCULATED AT 22' PER SPACE)

EXHIBIT A

VIRGINIA ROAD ON-STREET PARKING

RANCHO LOS CERRITOS, LONG BEACH

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ENGINEERS

TABLE 1

SPECIAL EVENTS SCHEDULE[1]

Rancho Los Cerritos Historic Ranch *Master Plan Implementation*

Rancho Los Cerritos Historic Ranch Special Event	Event Attendance		Frequency of Event	Time of Year	Schedule of Event (Time of Day)
	Current	Projected			
Restoration Fair	150	300	once / 3 years	Spring or Fall	Saturday: 12:30 PM to 4:30 PM
New Citizens Welcome	250-300	---	Annual	June	Saturday: 11:30 AM to 1:30 PM
Summer Concert Series	150-250	---	1 time / month	June-July-August	Weeknight: 5:00 PM to 7:30 PM
Mud Mania	400-500	750	Annual	August	Saturday: 12:30 PM to 4:30 PM
Antiques Appraisal Affaire	250-300[3]	---	once / 3 years	Spring or Fall	Saturday: 10:00 AM to 2:00 PM
Christmas Candelight Tours (2 days)	250-300[3]	---	Annual	December	Friday/Saturday: 6:30 PM to 9:30 PM
Christmas Open House	400-500	600	Annual	December	Sunday: 1:00 PM to 4:00 PM
Foundation Fund Raiser[4]	200	300	Annual	Spring	Saturday: 6:30 PM to 9:30 PM

[1] Source: Rancho Los Cerritos Historic Ranch.

[2] In future years, this event with the Antiques Appraisal Affaire and another to-be-determined event may be alternated so that only one large restoration-type event will be held once a year rotated every three years.

[3] This special events has a maximum of 300 persons attending the events, but only 100 persons are on-site at any one time (Source: Rancho Los Cerritos Staff).

[4] The first Foundation Fundraiser is scheduled for March 2001, at which up to 200 guests are anticipated. The maximum attendance for future events will not exceed 300 persons.

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TABLE 2

SPECIAL EVENTS PARKING DEMAND PROJECTIONS
Rancho Los Cerritos Historic Ranch *Master Plan Implementation*

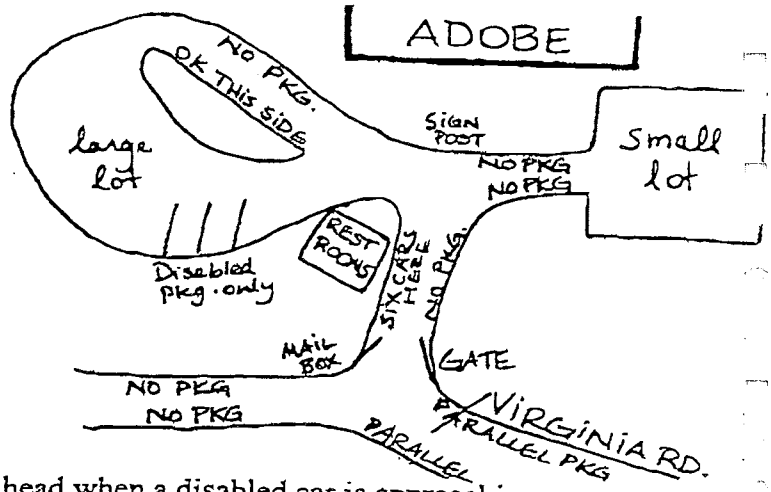
(1) Rancho Los Cerritos Historic Ranch Special Event	(2) Schedule of Event *(Peak on-site Accumulation)*	(3) Maximum Event Attendance (# of attendees)	(4) AverageVehicle Occupancy (attendees/ vehicle)	(5) Event Staff (# employees)	(6) Volunteer Support (# volunteers)	(7) Special Event Parking Demand Ratios	(8) # of Spaces Required Attendees	(9) Staff / Volunteers	(10) Total
Restoration Fair	Saturday: 12:30 PM to 4:30 PM *(2:00 PM)*	300	2	6	20	1 space/2 attendees plus 1 space/staff-volunteer	150	26	176
New Citizens Welcome	Weekday: 11:30 AM to 1:30 PM *(12:00 PM)*	300	3	4	12	1 space/3 attendees plus 1 space/staff-volunteer	100	16	116
Summer Concert Series	Weeknight: 5:00 PM to 7:30 PM *(6:00 PM)*	250	3	2	1	1 space/3 attendees plus 1 space/staff-volunteer	83	3	86
Mud Mania	Saturday: 12:30 PM to 4:30 PM *(1:30 PM)*	750	4	8	70	1 space/4 attendees plus 1 space/staff-volunteer	188	78	266
Antiques Appraisal Affaire[1]	Saturday: 10:00 AM to 2:00 PM *(10:30 AM)*	100	2	8	30	1 space/2 attendees plus 1 space/staff-volunteer	50	38	88
Christmas Candelight Tours (2 days)[1]	Friday/Saturday: 6:30 PM to 9:30 PM *(7:15 PM)*	100	3	8	35	1 space/3 attendees plus 1 space/staff-volunteer	33	43	76
Christmas Open House	Sunday: 1:00 PM to 4:00 PM *(1:30 PM)*	600	4	8	20	1 space/4 attendees plus 1 space/staff-volunteer	150	28	178
Foundation Fund Raiser	Saturday: 6:30 PM to 9:30 PM *(7:00 PM)*	300	2	4	16	1 space/2 attendees plus 1 space/staff-volunteer	150	20	170

[1] This special events has a maximum event attendance of 300 persons,but only 100 persons are on-site at any one time (Source: Rancho Los Cerritos Staff).

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APPENDIX A

PARKING MANAGEMENT PLAN



Volunteer Job Description:
Parking Coordinator

Working in shifts of three:

When there is still space in the lot:

Person A stands down at the gates and radios ahead when a disabled car is approaching.

Person B-1 stands at the top of the hill, near the restrooms/signpost. This person directs arriving cars into the small parking (if there's still room). If the small lot is full, person B-1 wants to make sure that the cars enter the large lot by continuing along the driveway (near the house), turning left into the large parking lot near the historic landmark marker.

Person C-1 has a radio and guides cars into the nearest available spot, or if the car has a disabled placard or plates, into the nearest disabled spot.

When the parking lot is becoming full:

As soon as there are only a few spots left, person C-1 radios to person A, saying "Only send up ten more cars (or how many spaces are left **plus** six spots along the driveway). Then person A only lets in that number of cars, so that no cars drive through the lot only to discover that it's full.

Person B-1 then walks down, past person A to the road (thus becoming person B-2). Cars now start parking on the street, so person B-2 starts guiding cars into spaces on the street. When the last (non-disabled) space in the lot is full, person C-1 counts how many disabled space are still available, then comes down and becomes person C-2.

Persons B-2 & C-2 have road duty: they walk up Virginia Road and have people park along the street. As the line of park cars grows, **persons B-2 & C-2 continue to walk up the street, flagging people into the nearest spot.** Another method: send ½ the cars toward the gate to have them turn around in the opening of the gate and park along the outbound side of the street as well. It is person As job to keep these cars from entering the parking lot (it's full!).

Person A counts the cars as they leave the event, and sends cars into available lot spaces.

When **disabled people** arrive after the lot is full, person C-2 radios ahead to person A that someone will need to get through to park in the reserved spaces in the lot. If those spaces are already full, the car can be let through to drop off its occupants, but then it must come back out and park on the street.

No one is ever allowed to double park, park along both sides of the driveway, or park below our entrance on Virginia Road. These are fire lanes and safety rules and are not bent for anyone.

If anyone is really mean or persistent, stand your ground and if they continue, come get a staff person. We do, after all, reserve our right to refuse service to anyone, but we have never had to!

Saved as "Parkvol.dsc" on Christmas Open House '95 disk

INITIAL STUDY

1. **Project title:**
   Rancho Los Cerritos

2. **Lead agency name and address:**
   City of Long Beach Planning Commission
   333 W. Ocean Boulevard
   Long Beach, CA 91711

3. **Contact person and phone number:**
   Robert A. Wise
   Environmental Planning
   333 West Ocean Boulevard, 5th Floor
   Long Beach, CA
   (562) 570-5081

4. **Project location:**
   4600 Virginia Road
   Long Beach, CA 90807

5. **Project sponsor's name and address:**
   Dennis Eschen
   2670 Studebaker Rd.
   Long Beach, CA 90807

6. **General plan designation:**
   LUD-11

7. **Zoning:**
   Institutional (I)

8. **Description of project:**

Rancho Los Cerritos is a National, State and Local Historical Landmark owned and operated by the City of Long Beach since 1955 as a public museum and historic site. Built in 1844, the two story abode and landscaped grounds echo with the rich history of Spanish, Mexican and American California, and the families who helped transform Southern California from its ranching beginning to a modern, urban society. In the late 19th century, the 27,000-acre cattle and sheep pastures of the Rancho began to decrease as the cities of Long Beach, Lakewood, Bellflower, Paramount, and Signal Hill began to develop and attract an increasing population. Today the Rancho is open for public tours and offers garden activities, lectures, workshops, family events and school trips. The Rancho has an active volunteer program and a California History Research Library.

The Master Plan for Rancho Los Cerritos is designed to serve as a guide for site development

and interpretation, and includes sections on structural and landscape restoration, maintenance, educational programming, visitor amenities, staff accommodations and collection needs. The site's primary educational goal is to interpret the relationship of the Rancho's diverse peoples to the development of the greater Long Beach area between the 1840s to 1940s. Most alterations made in 1930-1931 to the historic adobe and landscaped grounds will be restored and preserved, and several nineteenth century buildings will be reconstructed in accordance with the Secretary of the Interior's Standards of Historic Preservation. Additional recommendations were guided by security needs, aesthetic improvements, historical authenticity and a desire to preserve remaining views and the rural character of the site. The Master Plan provides for the phased development over a 25-year period.

To achieve the objectives of the Master Plan, Rancho Los Cerritos proposes to make the following improvements to the Rancho site:

1. Demolition:
   a. City added public restrooms,
   b. City added parking lot, and
   c. City added patio area.
2. Develop,
   a. Visitor Center measuring 50'x 25' external dimensions, with a basement of 966 sq. feet, a ground floor of 966 sq. feet and Restroom add-on of 190 sq. feet.
   b. Barn Complex with a foot print of 50' x 40' for the main building; and 80'x 20' for the utility buildings. The Barn Complex will consist of a basement of 3,600 sq. feet, a first floor of 3,600 sq. feet and a second floor of 2,000 sq. feet. this structure will be used as staff office space, storage, a reception area for visitors and a museum.
   c. Caretaker's House of 800 sq. feet
   d. Additional Restrooms with a footprint of 20' x 8' feet.

9. Surrounding land uses and setting:

Rancho Los Cerritos is located within a community dominated with large estate style homes and a country club. The surrounding setting of mature trees and rural appearance make the general aesthetic value of the area very picturesque. The entrance of the Rancho is not adjacent to any homes and is located north of the entrance to the country club. The nearest signal family residences are located past the entrance of the Rancho, on the northern perimeter of the Rancho.

10. Other public agencies whose approval is required:

City of Long Beach Planning and Building
City of Long Beach City Council
City of Long Beach Planning Commission

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

Aesthetics		Agriculture Resources		Air Quality
Biological Resources	√	Cultural Resources		Geology /Soils
Hazards & Hazardous Materials		Hydrology / Water Quality	√	Land Use / Planning
Mineral Resources	√	Noise		Population / Housing
Public Services		Recreation	√	Transportation/Traffic
Utilities / Service Systems		Mandatory Findings of Significance		

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. √

I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

_____

Signature Date

Printed Name

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less than Significant with "Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced) .

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration Section 1 5063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.

   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the score of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated", describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats.

9) The explanation of each issue should identify:

   a) the significance criteria or threshold, if any, used to evaluate each question; and

   b) the mitigation measure identified, if any, to reduce the impact to less than significance.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No impact
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?				√
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			√	
c) Substantially degrade the existing visual character or quality of the site and its surroundings?				√
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				√
II. AGRICULTURE RESOURCES -- In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				√
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				√
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				√
III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable Air Quality Attainment Plan?				√
b) Violate any air quality standard or contribute to an existing or projected air quality violation?				√

	Potentially	Less Than Significant With	Less Than

	Significant Impact	Mitigation Incorporation	Significant Impact	No impact
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				√
d) Expose sensitive receptors to substantial pollutant concentrations?			√	
e) Create objectionable odors affecting a substantial number of people?				√
IV. BIOLOGICAL RESOURCES -- Would the project:				
a) Have a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U. S. Fish and Wildlife Service?				√
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U. S. Fish and Wildlife Service?				√
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				√
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				√

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				√
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?				√
V. CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	√			
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	√			
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	√			
d) Disturb any human remains, including those interred outside of formal cemeteries?				√
VI. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				√
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			√	
ii) Strong seismic ground shaking?			√	

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No impact
iii) Seismic-related ground failure, including liquefaction?			√	
iv) Landslides?				√
b) Result in substantial soil erosion or the loss of topsoil?				√
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				√
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				√
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				√
VII. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				√
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				√
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				√
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				√
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				√

	Potentially	Less Than Significant With	Less Than

	Significant Impact	Mitigation Incorporation	Significant Impact	No impact
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				√
9) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				√
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				√
VIII. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?				√
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				√
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			√	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				√
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				√
f) Otherwise substantially degrade water quality?				√

	Incorporation	Potentially Significant Impact	Less Than Significant With Mitigation Impact	Less Than Significant Impact	No Impact
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				√
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				√
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				√
j)	Inundation by seiche, tsunami, or mudflow?				√
IX.	**LAND USE AND PLANNING --** Would the project:				
a)	Physically divide an established community?				√
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?		√		
c)	Conflict with any applicable habitat conservation plan or natural communities conservation plan?				√
X.	**MINERAL RESOURCES --** Would the project:				
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				√
b)	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				√
XI.	**NOISE --** Would the project result in:				
a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		√		
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			√	

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No impact
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				√
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		√		
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				√
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				√
XII. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				√
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				√
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				√
XIII. PUBLIC SERVICES -- Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?				√
b) Police protection?				√
c) Schools?				√

	Potentially	Less Than Significant With	Less Than

	Significant Impact	Mitigation Incorporation	Significant Impact	No impact
d) Parks?				√
e) Other public facilities?				√
XIV. RECREATION --				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				√
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				√
XV. TRANSPORTATION/TRAFFIC -- Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	√			
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				√
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				√
d) Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				√
e) Result in inadequate emergency access?		√		
f) Result in inadequate parking capacity?	√			
9) Conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				√

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No impact
XVI. UTILITIES AND SERVICE SYSTEMS --				
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				√
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				√
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				√
d) Have sufficient water supplies available to serve the project from existing entitlement and resources, or are new or expanded entitlement needed?				√
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				√
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				√
g) Comply with federal, state, and local statutes and regulations related to solid waste?				√
XVII. MANDATORY FINDINGS OF SIGNIFICANCE --				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				√

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No impact
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				√
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				√

I. AESTHETICS

Rancho Los Cerritos is a unique historical site within the City of Long Beach. It is on the National Register and provides a physical link to California's past. Any development or renovation to the Rancho could, if improperly performed, have a significant impact to the historical value of the site. While most of the discussion regarding the impact to the historical value of the Rancho will be discussed under Cultural Resources in the Draft Environmental Impact Report, the report should also address any potential impacts to the aesthetic importance of Rancho Los Cerritos.

II. AGRICULTURAL RESOURCES

Rancho Los Cerritos consists of 4.74 acres of land and is bordered by the Virginia Country Club on two sides, and single family residential on the other two sides. The City of Long Beach has developed around the Rancho and is highly urbanized.

Development of the proposed project will not result in any significant impact to agricultural resources as defined in the California Agricultural Land Evaluation and Site Model (1997) prepared by the California Department of Conservation. The proposed project is not located on farmland or within an agricultural zone.

III. AIR QUALITY

The air quality in the project area is generally good and influenced by the marine wind pattern. The Draft Environmental Impact Report should evaluate potential air pollutant emissions resulting from the increased vehicle trips to Rancho Los Cerritos.

IV. BIOLOGICAL

The adobe abode and surrounding land of Rancho Los Cerritos was established in 1844 and once encompassed 27,000 acres. As cities began to develop, the area of rangeland of the Rancho continued to decrease along with native plant and animal life. Today the Rancho consists of 4.72 acres with no animal of plant life identified as endangered or threatened by the California Department of Fish and Game on the site.

There are many trees at Rancho Los Cerritos that may be considered to be of historical significance. Among these tree are those planted during the Temple Family period (1844-1866), the early Bixby Family period (1866-1930) and the Bixby / Cornell Family period (1930-1954). The Draft Environmental Impact Report should address the proposed project impact to these trees.

V. CULTURAL RESOURCES

Rancho Los Cerritos provides an interesting and rare link to California's past. There are very few remaining sites within California that provide a glimpse into life in California during the

Rancho period of the state. Rancho Los Cerritos provides visitors to the site the opportunity to explore the adobe abode, courtyard, surrounding grounds and museum to learn about this period in California history. Preservation of the unique cultural resources is essential to preserve one of the few remaining physical links to California's past.

The site at Rancho Los Cerritos is also expected to contain many latent archeological artifacts. In earlier excavations at the site, various artifacts dating back to the 1840's were discovered. Development of the proposed project could have a significant impact on this resource.

The Draft Environmental Impact Report should address potential impacts to both cultural and archeological resources from development of the proposed project.

VI. GEOLOGY AND SOILS

No Faults are known to underlie the site, nor is the site in a designated tsunami influence area. Based on the *Seismic Element*, the liquefaction potential is considered low. However due to the use of adobe and lack of foundation the abode is susceptible to the increased risk of structural failure in a seismic event. The proposed project will seismically retrofit the adobe abode to help reduce the risk of structural failure during a seismic event.

The Draft Environmental Impact Report should address the seismic risk associated with the site and the proposed project.

VII. HAZARDS AND HAZARDOUS MATERIALS

The project site is not known to store or contain hazardous materials that would pose a threat to the health and safety of individuals on the site, or those within the vicinity of the project. The project site is not located within two miles of a public or private airport, and while large trees and other vegetation surround the site, the project site is not located within an area subject to wildland fires.

VIII. HYDROLOGY AND WATER QUALITY

The project site is not located within a flood zone as designated by the Flood Insurance Rate Map July 6, 1998. Development of the proposed project will include the development of new structures to facilitate the long term objectives and goals of Rancho Los Cerritos. These structures will have a marginal effect on the site's ability to absorb water over that which currently exist. This marginal reduction in water absorption is not anticipated to substantially increase the volume or quality of water runoff from the site.

IX. LAND USE AND PLANNING

Rancho Los Cerritos as discussed supra has been an established part of the community since 1844. The zoning for the proposed project site is Institutional (I). The implementation of the Master Plan for the Rancho is in conformity with the zoning code for the site. However, adjacent land uses to the proposed project site are zoned as Single Family Residential Large Lots, (R-1-L)

zone, which is considered a sensitive land use. Development of the proposed project could impact this land use.

Development of the proposed project will also reduce the current level of parking spaces available at the site. The reduced number of parking spaces available at the site may be inadequate to provided the required number of parking spaces needed to accommodate the proposed project site.

The Draft Environmental Impact Report should address the impact of the proposed project to adjacent land uses created from development of the proposed project and the potential issue inadequate parking.

X. MINERAL RESOURCES

Petroleum has played a significant role in the early development of the City of Long Beach. There were many oil extraction operations along the Los Angeles River, along the shoreline and throughout the city. Oil extraction operations have diminished considerably through the years as this resource has been depleted and the costs of further extraction have made in it economically impractical.

Rancho Los Cerritos was operating as a rancho prior to the discovery and extraction of oil from the area. Many of the lands once used for oil extraction operations once were part of the rancho. Development of the Master Plan and the proposed improvements to Rancho Los Cerritos will have no effect on any on going or future oil extraction operations.

There are no other known mineral resources that will be impacted by the proposed project. Therefore, unless other comments relating to this resource are received no further analysis will be discussed.

XI. NOISE

Implementation of the Master Plan for Rancho Los Cerritos and development of the proposed improvements are expected to generate an increase in visitors to the site. This expected increase is anticipated to increase the ambient noise levels during the Rancho's operating hours. In addition special events at the Rancho will also increase the ambient noise level during the event.

The anticipated increase in ambient noise levels generated by the site will be discussed further in the Draft Environmental Impact Report.

XII. POPULATION AND HOUSING

Development of the proposed project and implementation of the Master Plan for Rancho Los Cerritos is expected to increase the number of visitor to the site. However, the increase in visitation to the Rancho is not expected to translate into an increase in demand for housing in the City of Long Beach or surrounding communities. In addition, the level of employment at the

Rancho is relatively small and not anticipated to have a significant impact on housing stocks.

XIII. PUBLIC SERVICES

Fire protection is provided by the Long Beach Fire Department, which has 23 in-city stations. The Department is divided into Fire Prevention, Fire Suppression, Bureau of Instruction, and the Bureau of Technical Services. The Fire Department is accountable for medical, paramedic, and other first aid rescue calls from the community. The project area is principally served by Fire Station No. 9, which is located at 3917 Long Beach Boulevard. However, any fire unit in the system may respond to the project location depending upon availability.

The Long Beach Police Department serves the project site. The Department is divided into Patrol, Traffic, Detective, Juvenile, Vice, Community, Jail, Records, and Administration Sections. The City has four Patrol Divisions; East, West, North and South. The North Division services the project area.

The City of Long Beach is primarily served by the Long Beach Unified School District, which also serves the Cities of Signal Hill, and most of Lakewood. The District has been operating at or over capacity. The State Legislature has determined that developer fees may be assessed to pay for new facilities needed and mitigate the impact of new development.

General maintenance of infrastructure is currently a municipal service.

All public services are adequate to meet the demand placed on them by the proposed project, and continue to meet the needs of the rest of the community. This resource will not be discussed in the Draft Environmental Impact Report unless information is received to warrant further discussion.

XIV. RECREATION

Responsibility for management of Rancho Los Cerritos is maintained within the City of Long Beach Department of Parks, Recreation and Marine. Development of the Master Plan and the proposed project for Rancho Los Cerritos will improve the both the recreational and education quality of the Rancho. By improving visitor accommodations and restoring portions of the Rancho the City would be preserving an important aspect of the City's history and expanding the opportunity for visitor enjoyment of this facility.

This resource will not be discussed further in the Draft Environmental Impact Report unless comments received warrant further discussion.

XV. TRANSPORTATION

Development of the proposed project and implementation of the Master Plan for Rancho Los Cerritos is expected to generate additional traffic levels over those that currently exist. Access to the site is obtained by traveling on two predominately residential streets. The street leading to

the site, Virginia Road, is lined by well-maintained estate type homes. Development of the proposed project could increase the traffic volume using these residential streets. In addition, limited parking within the site may require vehicles to park on the street out side the Rancho. The Draft Environmental Impact Report should address the impact of this resource.

XVI. UTILITIES AND SERVICE SYSTEMS

Development of the proposed project and implementation of the Master Plan at Rancho Los Cerritos, is not expected to significantly increase the demand for utilities and services over that which currently exist.

Present drainage capacity is expected to be adequate to accommodate project demands, and no new treatment facilities would be required for development of the proposed project. While the Rancho will construct new structures on site, additional water runoff is expected to be marginal due to the size of the structures and the sites soil capacity to absorb water.

The City's Water Department supplies water to the City of Long Beach. Local groundwater and imported water make up the Long Beach water supply. About 46 percent of the water comes from the Department's 25 active wells. About 54 percent is treated water purchased from the Metropolitan Water District of Southern California (MWD).The proposed project will have no significant impact on the City's water system. While it is anticipated that the site will attract more visitors marginally increasing water demand, the primary use of water, landscaping needs, will remain largely unaltered.

Solid waste generated in the City of Long Beach is collected by the City's Integrated Resources Bureau -Refuse Collection Division, or by a private waste-removal company licensed by the City. The City has an Integrated Waste Management Program that encourages waste reduction, recycling and recovery efforts. It is the City's policy to support a hierarchy of waste management preferences that give priority to source reduction, materials reuse and recycling in order to minimize the amount of waste to be managed. Refuse that is collected by the City is taken to the South East Resource Recoveries Facility (SERRF), a publicly owned solid waste management facility that uses mass burn technology. Private waste removal companies either uses the SERRF, or a refuse transfer station.

The Proposed Site will have and a temporary increase in solid refuge due to excess building materials during the construction of the building on site. In addition, increased visitation to the site will also generate additional refuge. However the increase in refuge will have no significantly impact on the waste disposal capabilities of the city.

Unless further comments are received regarding this resource that warrant additional comment and analysis, this resource will not be discussed in the Draft Environmental Impact Report.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE

Implementation of the Master Plan and development of the proposed project for Rancho Los Cerritos is not anticipated significant effect either individually or cumulatively on the

environment. While the proposed project will include new construction, renovation and an increase in the amount of visitors, these activities are substantially the same as the current setting. The Ranch project poses no significant risk to any habitat for fish or wildlife and the riparian nature of the site will remain largely unaltered.

A general analysis and statement regarding the over all impact of the project will be made in the Draft Environmental Impact Report.

CITY OF LONG BEACH

ORIGINAL FILED

DEPARTMENT OF PLANNING AND BUILDING
333 W. Ocean Boulevard, 5th Floor • Long Beach, CA 90802 • (562) 570-6894 FAX (562) 570-6068
COMMUNITY AND ENVIRONMENTAL PLANNING DIVISION

SEP 22 1999

LOS ANGELES, COUNTY CLERK

NOTICE OF PREPARATION

TO:

FROM: Robert Wise
Environmental Planner
City of Long Beach
333 W. Ocean Blvd.
Long Beach, CA 90802

SUBJECT: Notice of Preparation of a Draft Environmental Impact Report

The City of Long Beach Planning Commission will be the Lead Agency and will prepare an environmental impact report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the probable environmental effects are contained in the attached materials. A copy of the Initial Study X is, ____ is not, attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

Please send your response to Robert Wise at the address shown above. We will need the name for a contact person in your agency.

Project Title: Rancho Los Cerritos

Project Location: 4600 Virginia Road Long Beach (City) Los Angeles (County)

Project Description: The Rancho's on the National Register. The proposal consists of demolishing the patio, parking lot and restrooms and constructing a visitor center, barn complex, caretakers house and new restrooms.

Date: 8/27/99 Signature:

Robert Wise
Environmental Planner
(562) 570-5081

99148658

Reference: California Administrative Code, Title 14, Sections 15082(a), 15103, 15357

INITIAL STUDY

RANCHO LOS CERRITOS
4600 VIRGINIA ROAD
LONG BEACH, CA 90807

Prepared by:

Community and Environmental Planning Division
Department of Planning and Building
333 W. Ocean Boulevard, 5th Floor
Long Beach, CA 90802

INITIAL STUDY

1. **Project title:**
   Rancho Los Cerritos

2. **Lead agency name and address:**
   City of Long Beach Planning Commission
   333 W. Ocean Boulevard
   Long Beach, CA 91711

3. **Contact person and phone number:**
   Robert A. Wise
   Environmental Planning
   333 West Ocean Boulevard, 5th Floor
   Long Beach, CA
   (562) 570-5081

4. **Project location:**
   4600 Virginia Road
   Long Beach, CA 90807

5. **Project sponsor's name and address:**
   Dennis Eschen
   2670 Studebaker Rd.
   Long Beach, CA 90807

6. **General plan designation:**
   LUD-11

7. **Zoning:**
   Institutional (I)

8. **Description of project:**

Rancho Los Cerritos is a National, State and Local Historical Landmark owned and operated by the City of Long Beach since 1955 as a public museum and historic site. Built in 1844, the two story adobe abode and landscaped grounds echo with the rich history of the Spanish, Mexican and American California, and the families who helped transform Southern California from its ranching beginning to a modern, urban society. In the late 19th century, the 27,000-acre cattle and sheep pastures of the Rancho began to decrease as the cities of Long Beach, Lakewood, Bellflower, Paramount, and Signal Hill began to develop and attract an increasing population. Today the Rancho is open for public tours and offers garden activities, lectures, workshops, family events and school trips. The Rancho has an active volunteer program and a California History Research Library.

The Master Plan for Rancho Los Cerritos is designed to serve as a guide for site development and interpretation, and includes sections on structural and landscape restoration, maintenance, educational programming, visitor amenities, staff accommodations and collection needs. The site's primary educational goal is to interpret the relationship the relationship of the Rancho's diverse peoples to the development of the greater Long Beach area between the 1840s to 1940s. Most alterations made in 1930-1931 to the historic adobe and landscaped grounds will be restored and preserved, and several nineteenth century buildings will be reconstructed in accordance with the Secretary of the Interior's Standards of Historic Preservation. Additional recommendations were guided by security needs, aesthetic improvements, historical authenticity and a desire to preserve remaining views and rural character of the site. The Master Plan provides for the phased development over a 20-25-year period.

To achieve the objectives of the Master Plan, Rancho Los Cerritos proposes to make the following improvements to the Rancho site:

1. Demolition:
   a. current public restrooms,
   b. parking lot, and
   c. patio area.
2. Develop,
   a. Visitor Center measuring 50'x 25' external dimensions, with a basement of 966 sq. feet, a ground floor of 966 sq. feet and Restroom add-on of 190 sq. feet.
   b. Barn Complex with a foot print of 50' x 40' for the main building; and 80'x 20' for the utility buildings. The Barn Complex will consist of a basement of 3,600 sq. feet, a first floor of 3,600 sq. feet and a second floor of 2,000 sq. feet. this structure will be used as staff office space, storage, a reception area for visitors and a museum.
   c. Caretaker's House of 800 sq. feet
   d. Additional Restrooms with a footprint of 20' x 8' feet.

9. Surrounding land uses and setting:

Rancho Los Cerritos is located within a community dominated with large estate style homes and a country club. The surrounding setting of mature trees and rural appearance make the general aesthetic value of the area very picturesque. The entrance of the Rancho is not adjacent to any homes and is located north of the entrance to the country club. The nearest signal family residences are located past the entrance of the Rancho, on the northern perimeter of the Rancho.

10. Other public agencies whose approval is required:

City of Long Beach Planning and Building
City of Long Beach City Council
City of Long Beach Planning Commission

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

Aesthetics		Agriculture Resources		Air Quality
Biological Resources	√	Cultural Resources		Geology /Soils
Hazards & Hazardous Materials		Hydrology / Water Quality	√	Land Use / Planning
Mineral Resources	√	Noise		Population / Housing
Public Services		Recreation	√	Transportation/Traffic
Utilities / Service Systems		Mandatory Findings of Significance		

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. ____

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared. ____

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. √

I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. ____

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required. ____

Signature

6/16/99
Date

Robert A. Wise
Printed Name

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less than Significant with "Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced) .

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration Section 1 5063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.

   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the score of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated", describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats.

9) The explanation of each issue should identify:

   a) the significance criteria or threshold, if any, used to evaluate each question; and

   b) the mitigation measure identified, if any, to reduce the impact to less than significance.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No impact
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?				√
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			√	
c) Substantially degrade the existing visual character or quality of the site and its surroundings?				√
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				√
II. AGRICULTURE RESOURCES -- In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				√
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				√
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				√
III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable Air Quality Attainment Plan?				√
b) Violate any air quality standard or contribute to an existing or projected air quality violation?				√

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No impact
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				√
d) Expose sensitive receptors to substantial pollutant concentrations?			√	
e) Create objectionable odors affecting a substantial number of people?				√
IV. BIOLOGICAL RESOURCES -- Would the project:				
a) Have a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U. S. Fish and Wildlife Service?				√
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U. S. Fish and Wildlife Service?				√
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				√
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				√

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				√
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?				√
V. CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	√			
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	√			
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	√			
d) Disturb any human remains, including those interred outside of formal cemeteries?				√
VI. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				√
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			√	
ii) Strong seismic ground shaking?			√	

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No impact
iii) Seismic-related ground failure, including liquefaction?			√	
iv) Landslides?				√
b) Result in substantial soil erosion or the loss of topsoil?				√
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				√
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				√
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				√
VII. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				√
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				√
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				√
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				√
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				√

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No impact
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				√
9) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				√
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				√
VIII. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?				√
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				√
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			√	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				√
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				√
f) Otherwise substantially degrade water quality?				√

	Potentially Significant Impact	Less Than Significant With Mitigation Impact	Less Than Significant Impact	No Impact	Incorporation
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				√	
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				√	
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				√	
j) Inundation by seiche, tsunami, or mudflow?				√	
IX. LAND USE AND PLANNING -- Would the project:					
a) Physically divide an established community?				√	
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?		√			
c) Conflict with any applicable habitat conservation plan or natural communities conservation plan?				√	
X. MINERAL RESOURCES -- Would the project:					
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				√	
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				√	
XI. NOISE -- Would the project result in:					
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		√			
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			√		

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No impact
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				√
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		√		
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				√
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				√
XII. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				√
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				√
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				√
XIII. PUBLIC SERVICES -- Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?				√
b) Police protection?				√
c) Schools?				√

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No impact
d) Parks?				√
e) Other public facilities?				√
XIV. RECREATION --				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				√
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				√
XV. TRANSPORTATION/TRAFFIC -- Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	√			
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				√
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				√
d) Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				√
e) Result in inadequate emergency access?		√		
f) Result in inadequate parking capacity?	√			
9) Conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				√

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No impact
XVI. UTILITIES AND SERVICE SYSTEMS --				
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				√
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				√
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				√
d) Have sufficient water supplies available to serve the project from existing entitlement and resources, or are new or expanded entitlement needed?				√
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				√
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				√
g) Comply with federal, state, and local statutes and regulations related to solid waste?				√
XVII. MANDATORY FINDINGS OF SIGNIFICANCE --				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				√

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No impact
d) Parks?				√
e) Other public facilities?				√
XIV. RECREATION --				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				√
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				√
XV. TRANSPORTATION/TRAFFIC -- Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	√			
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				√
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				√
d) Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				√
e) Result in inadequate emergency access?		√		
f) Result in inadequate parking capacity?	√			
9) Conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				√

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No impact
XVI. UTILITIES AND SERVICE SYSTEMS --				
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				√
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				√
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				√
d) Have sufficient water supplies available to serve the project from existing entitlement and resources, or are new or expanded entitlement needed?				√
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				√
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				√
g) Comply with federal, state, and local statutes and regulations related to solid waste?				√
XVII. MANDATORY FINDINGS OF SIGNIFICANCE --				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				√

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No impact
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				√
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				√

I. AESTHETICS

Rancho Los Cerritos is a unique historical site within the City of Long Beach. It is on the National Register and provides a physical link to California's past. Any development or renovation to the Rancho could, if improperly performed, have a significant impact to the historical value of the site. While most of the discussion regarding the impact to the historical value of the Rancho will be discussed under Cultural Resources in the Draft Environmental Impact Report, the report should also address any potential impacts to the aesthetic importance of Rancho Los Cerritos.

II. AGRICULTURAL RESOURCES

Rancho Los Cerritos consists of 4.74 acres of land and is bordered by the Virginia Country Club on two sides, and single family residential on the other two sides. The City of Long Beach has developed around the Rancho and is highly urbanized.

Development of the proposed project will not result in any significant impact to agricultural resources as defined in the California Agricultural Land Evaluation and Site Model (1997) prepared by the California Department of Conservation. The proposed project is not located on farmland or within an agricultural zone.

Therefore unless further investigation or comments warrant further evaluation of this resource, this resource will not be discussed further.

III. AIR QUALITY

The air quality in the project area is generally good and influenced by the marine wind pattern. The Draft Environmental Impact Report should evaluate potential air pollutant emissions resulting from the increased vehicle trips to Rancho Los Cerritos.

IV. BIOLOGICAL

The adobe abode and surrounding land of Rancho Los Cerritos was established in 1844 and once encompassed 27,000 acres. As cities began to develop, the area of rangeland of the Rancho continued to decrease along with native plant and animal life. Today the Rancho consists of 4.72 acres with no animal of plant life identified as endangered or threatened by the California Department of Fish and Game on the site.

There are many trees at Rancho Los Cerritos that may be considered to be of historical significance. Among these tree are those planted during the Temple Family period (1844-1866), the early Bixby Family period (1866-1930) and the Bixby / Cornell Family period (1930-1954). The Draft Environmental Impact Report should address the proposed project impact to these trees.

V. CULTURAL RESOURCES

Rancho Los Cerritos provides an interesting and rare link to California's past. There are very few remaining sites within California that provide a glimpse into life in California during the Rancho period of the state. Rancho Los Cerritos provides visitors to the site the opportunity to explore the adobe abode, courtyard, surrounding grounds and museum to learn about this period in California history. Preservation of the unique cultural resources is essential to preserve one of the few remaining physical links to California's past.

The site at Rancho Los Cerritos is also expected to contain many latent archeological artifacts. In earlier excavations at the site, various artifacts dating back to the 1840's were discovered. Development of the proposed project could have a significant impact on this resource.

The Draft Environmental Impact Report should address potential impacts to both cultural and archeological resources from development of the proposed project.

VI. GEOLOGY AND SOILS

No Faults are known to underlie the site, nor is the site in a designated tsunami influence area. Based on the *Seismic Element*, the liquefaction potential is considered low. However due to the use of adobe and lack of foundation the abode is susceptible to the increased risk of structural failure in a seismic event. The proposed project will seismically retrofit the adobe abode to help reduce the risk of structural failure during a seismic event.

The Draft Environmental Impact Report should address the seismic risk associated with the site and the proposed project.

VII. HAZARDS AND HAZARDOUS MATERIALS

The project site is not known to store or contain hazardous materials that would pose a threat to the health and safety of individuals on the site, or those within the vicinity of the project. The project site is not located within two miles of a public or private airport, and while large trees and other vegetation surround the site, the project site is not located within an area subject to wildland fires.

Unless comments are received that necessitate further investigation to possible hazards associated with the site, no further analysis on this subject will be discussed.

VIII. HYDROLOGY AND WATER QUALITY

The project site is not located within a flood zone as designated by the Flood Insurance Rate Map July 6, 1998. Development of the proposed project will include the development of new structures to facilitate the long term objectives and goals of Rancho Los Cerritos. These structures will have a marginal effect on the site's ability to absorb water over that which currently exist. This marginal reduction in water absorption is not anticipated to substantially

increase the volume or quality of water runoff from the site.

Unless comments received necessitate further evaluation of this issue, this subject will not be discussed further.

IX. LAND USE AND PLANNING

Rancho Los Cerritos as discussed supra has been an established part of the community since 1844. The zoning for the proposed project site is Institutional (I). The implementation of the Master Plan for the Rancho is in conformity with the zoning code for the site. However, adjacent land uses to the proposed project site are zoned as Single Family Residential Large Lots, (R-1-L) zone, which is considered a sensitive land use. Development of the proposed project could impact this land use.

Development of the proposed project will also reduce the current level of parking spaces available at the site. The reduced number of parking spaces available at the site may be inadequate to provided the required number of parking spaces needed to accommodate the proposed project site.

The Draft Environmental Impact Report should address the impact of the proposed project to adjacent land uses created from development of the proposed project and the potential issue inadequate parking.

X. MINERAL RESOURCES

Petroleum has played a significant role in the early development of the City of Long Beach. There were many oil extraction operations along the Los Angeles River, along the shoreline and throughout the city. Oil extraction operations have diminished considerably through the years as this resource has been depleted and the costs of further extraction have made in it economically impractical.

Rancho Los Cerritos was operating as a rancho prior to the discovery and extraction of oil from the area. Many of the lands once used for oil extraction operations once were part of the rancho. Development of the Master Plan and the proposed improvements to Rancho Los Cerritos will have no effect on any on going or future oil extraction operations.

There are no other known mineral resources that will be impacted by the proposed project. Therefore, unless other comments relating to this resource are received no further analysis will be discussed.

XI. NOISE

Implementation of the Master Plan for Rancho Los Cerritos and development of the proposed improvements are expected to generate an increase in visitors to the site. This expected increase

is anticipated to increase the ambient noise levels during the Rancho's operating hours. In addition special events at the Rancho will also increase the ambient noise level during the event.

The anticipated increase in ambient noise levels generated by the site will be discussed further in the Draft Environmental Impact Report.

XII. POPULATION AND HOUSING

Development of the proposed project and implementation of the Master Plan for Rancho Los Cerritos is expected to increase the number of visitor to the site. However, the increase in visitation to the Rancho is not expected to translate into an increase in demand for housing in the City of Long Beach or surrounding communities. In addition, the level of employment at the Rancho is relatively small and not anticipated to have a significant impact on housing stocks.

Unless comments or further analysis indicates a need to address this resource further, this resource will not be discussed in the Draft Environmental Impact Report.

XIII. PUBLIC SERVICES

Fire protection is provided by the Long Beach Fire Department, which has 23 in-city stations. The Department is divided into Fire Prevention, Fire Suppression, Bureau of Instruction, and the Bureau of Technical Services. The Fire Department is accountable for medical, paramedic, and other first aid rescue calls from the community. The project area is principally served by Fire Station No. 9, which is located at 3917 Long Beach Boulevard. However, any fire unit in the system may respond to the project location depending upon availability.

The Long Beach Police Department serves the project site. The Department is divided into Patrol, Traffic, Detective, Juvenile, Vice, Community, Jail, Records, and Administration Sections. The City has four Patrol Divisions; East, West, North and South. The North Division services the project area.

The City of Long Beach is primarily served by the Long Beach Unified School District, which also serves the Cities of Signal Hill, and most of Lakewood. The District has been operating at or over capacity. The State Legislature has determined that developer fees may be assessed to pay for new facilities needed and mitigate the impact of new development.

General maintenance of infrastructure is currently a municipal service.

All public services are adequate to meet the demand placed on them by the proposed project, and continue to meet the needs of the rest of the community. This resource will not be discussed in the Draft Environmental Impact Report unless information is received to warrant further discussion.

XIV. RECREATION

Responsibility for management of Rancho Los Cerritos is maintained within the City of Long Beach Department of Parks, Recreation and Marine. Development of the Master Plan and the proposed project for Rancho Los Cerritos will improve the both the recreational and education quality of the Rancho. By improving visitor accommodations and restoring portions of the Rancho the City would be preserving an important aspect of the City's history and expanding the opportunity for visitor enjoyment of this facility.

This resource will not be discussed further in the Draft Environmental Impact Report unless comments received warrant further discussion.

XV. TRANSPORTATION

Development of the proposed project and implementation of the Master Plan for Rancho Los Cerritos is expected to generate additional traffic levels over those that currently exist. Access to the site is obtained by traveling on two predominately residential streets. The street leading to the site, Virginia Road, is lined by well-maintained estate type homes. Development of the proposed project could increase the traffic volume using these residential streets. In addition, limited parking within the site may require vehicles to park on the street out side the Rancho. The Draft Environmental Impact Report should address the impact of this resource.

XVI. UTILITIES AND SERVICE SYSTEMS

Development of the proposed project and implementation of the Master Plan at Rancho Los Cerritos, is not expected to significantly increase the demand for utilities and services over that which currently exist.

Present drainage capacity is expected to be adequate to accommodate project demands, and no new treatment facilities would be required for development of the proposed project. While the Rancho will construct new structures on site, additional water runoff is expected to be marginal due to the size of the structures and the sites soil capacity to absorb water.

The City's Water Department supplies water to the City of Long Beach. Local groundwater and imported water make up the Long Beach water supply. About 46 percent of the water comes from the Department's 25 active wells. About 54 percent is treated water purchased from the Metropolitan Water District of Southern California (MWD).The proposed project will have no significant impact on the City's water system. While it is anticipated that the site will attract more visitors marginally increasing water demand, the primary use of water, landscaping needs, will remain largely unaltered.

Solid waste generated in the City of Long Beach is collected by the City's Integrated Resources Bureau -Refuse Collection Division, or by a private waste-removal company licensed by the City. The City has an Integrated Waste Management Program that encourages waste reduction, recycling and recovery efforts. It is the City's policy to support a hierarchy of waste management preferences that give priority to source reduction, materials reuse and recycling in order to minimize the amount of waste to be managed. Refuse that is collected by the City is

taken to the South East Resource Recoveries Facility (SERRF), a publicly owned solid waste management facility that uses mass burn technology. Private waste removal companies either uses the SERRF, or a refuse transfer station.

The Proposed Site will have and a temporary increase in solid refuge due to excess building materials during the construction of the building on site. In addition, increased visitation to the site will also generate additional refuge. However the increase in refuge will have no significantly impact on the waste disposal capabilities of the city.

Unless further comments are received regarding this resource that warrant additional comment and analysis, this resource will not be discussed in the Draft Environmental Impact Report.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE

Implementation of the Master Plan and development of the proposed project for Rancho Los Cerritos is not anticipated significant effect either individually or cumulatively on the environment. While the proposed project will include new construction, renovation and an increase in the amount of visitors, these activities are substantially the same as the current setting. The Ranch project poses no significant risk to any habitat for fish or wildlife and the riparian nature of the site will remain largely unaltered.

A general analysis and statement regarding the over all impact of the project will be made in the Draft Environmental Impact Report.

STATE OF CALIFORNIA

Governor's Office of Planning and Research
State Clearinghouse

Gray Davis
GOVERNOR

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916-445-0613 FAX 916-323-3018 www.opr.ca.gov/clearinghouse.html

Loretta Lynch
DIRECTOR

Notice of Preparation

September 15, 1999

To: Reviewing Agencies

Re: Rancho Los Cerritos
SCH# 99091075

Attached for your review and comment is the Notice of Preparation (NOP) for the Rancho Los Cerritos draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Gerhardt H. Felgemaker
Long Beach Planning division
333 W. Ocean Blvd.
5th Floor
Long Beach, CA 90802

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

TR for MB
Mosie Boyd
State Clearinghouse

Attachments
cc: Lead Agency

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SCH

12/9/2025 Board Meeting
12/8/2020 Board Meeting
7-6
7-5
Attachment 1, Page 946 of 1215
Attachment 3, Page 941 of 1210

South Coast
Air Quality Management District
21865 E. Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 • http://www.aqmd.gov

September 22, 1999

Mr. Robert Wise
Environmental Planner
City of Long Beach
333 W. Ocean Boulevard
Long Beach, CA 90802

Dear Mr. Wise:

Notice of Preparation of an Environmental Impact Report
Rancho Los Cerritos

The South Coast Air Quality Management District (AQMD) appreciates the opportunity to comment on the above-mentioned document. The AQMD's comments are recommendations regarding the analysis of potential air quality impacts from the proposed project that should be included in the Draft Environmental Impact Report (EIR).

Air Quality Analysis

The AQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. The AQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from the AQMD's Subscription Services Department by calling (909) 396-3720.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project. Air quality impacts from both construction and operations should be considered. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, that is, sources that generate or attract vehicular trips should be included in the evaluation. An analysis of all toxic air contaminant impacts due to the decommissioning or use of equipment potentially generating such air pollutants should also be included.

Mitigation Measures

In the event that the project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures be utilized during project construction and operation to minimize or eliminate significant adverse air quality impacts. To assist the Lead Agency with identifying possible mitigation measures for the project, please refer to Chapter 11 of the AQMD CEQA Air Quality Handbook for sample air quality mitigation measures. Additionally, AQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook contain numerous measures for controlling construction-related emissions that should be considered for use as CEQA mitigation if not otherwise required. Pursuant to state CEQA Guidelines Section 15126 (c), any impacts resulting from mitigation measures must also be discussed.

Data Sources

AQMD rules and relevant air quality reports and data are available by calling the AQMD's Public Information Center at (909) 396-3600. Much of the information available through the Public Information Center is also available via the AQMD's World Wide Web Homepage (http://www.aqmd.gov).

The AQMD is willing to work with the Lead Agency to ensure that project-related emissions are accurately identified, categorized, and evaluated. Please call Ms. Tara Tisopulos, Air Quality Specialist, CEQA Section, at (909) 396-3102 if you have any questions regarding this letter.

Sincerely,

Steve Smith

Steve Smith, Ph.D.
Program Supervisor, CEQA Section
Planning, Rule Development and Area Sources

SS:TT:li

LAC990915-04LI
Control Number

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
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Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

CHARLES W. CARRY
Chief Engineer and General Manager

September 27, 1999

File No: 03-00.04-00

Mr. Robert Wise
City of Long Beach
Department of Planning and Building
333 W. Ocean Boulevard, 5th Floor
Long Beach, CA 90802

Dear Mr. Wise:

Rancho Los Cerritos, 4600 Virginia Road, Long Beach

The County Sanitation Districts of Los Angeles County (Districts) received a Negative Declaration for the subject project on September 13, 1999. The proposed development is located within the jurisdictional boundaries of District No. 3. We offer the following comments regarding sewerage service:

1. The wastewater flow originating from the proposed project will discharge to a local sewer line, which is not maintained by the Districts, for conveyance to the Districts' North Long Beach Trunk Sewer, Section 2, located in Pacific Avenue at 49th Street. This 30-inch diameter trunk sewer has a design capacity of 7.2 million gallons per day (mgd) and conveyed a peak flow of 2.8 mgd when last measured in 1998.

2. The wastewater generated by the proposed project will be treated at the Joint Water Pollution Control Plant (JWPCP) located in the City of Carson. The JWPCP has a design capacity of 385.0 mgd and currently processes an average flow of 330.3 mgd.

3. The expected average wastewater flow from the project site is 2,556 gallons per day.

4. The Districts are empowered by the California Health and Safety Code to charge a fee for the privilege of connecting (directly or indirectly) to the Districts' Sewerage System or **increasing the existing strength and/or quantity of wastewater attributable to a particular parcel or operation already connected**. This connection fee is required to construct an incremental expansion of the Sewerage System to accommodate the proposed project which will mitigate the impact of this project on the present Sewerage System. Payment of a connection fee will be required before a permit to connect to the sewer is issued.

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5. The design capacities of the Districts' wastewater treatment facilities are based on population forecasts adopted in the Southern California Association of Governments'.(SCAG) 1994 Regional Comprehensive Plan and Guide (RCPG). The RCPG is part of the 1994 South Coast Air Quality Management Plan (AQMP). The AQMP and RCPG are jointly prepared by the South Coast Air Quality Management District (SCAQMD) and SCAG as a requirement of the Federal Clean Air Act (CAA). In order to conform with the AQMP, all expansions of Districts' facilities must be sized and service phased in a manner which will be consistent with the Growth Management Element of the RCPG. The Growth Management Element contains a regional growth forecast for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial which was prepared by SCAG. Specific policies included in the RCPG which deal with the management of growth will be incorporated into the AQMP strategies to improve air quality in the South Coast Air Basin. The available capacity of the Districts' treatment facilities will, therefore, be limited to levels associated with approved growth identified in the RCPG. As such, this letter does not constitute a guarantee of wastewater service, but is to advise you that the Districts intend to provide this service up to the levels which are legally permitted and to inform you of the currently existing capacity and any proposed expansion of the Districts' facilities.

If you have any questions, please contact the undersigned at (562) 699-7411, extension 2717.

Very truly yours,

Charles W. Carry

Ruth I. Charles

Ruth I. Charles
Engineering Technician
Planning & Property Management Section

RIC:eg

SOUTHERN CALIFORNIA
ASSOCIATION of GOVERNMENTS

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Ventura County: Judy Mikels, Ventura County • Donna De Paola, San Buenaventura • Andrew Fox, Thousand Oaks • Toni Young, Port Hueneme

Riverside County Transportation Commission: Robin Lowe, Hemet

Ventura County Transportation Commission: Bill Davis, Simi Valley

Printed on Recycled Paper 559-8/24/99

October 4, 1999

Mr. Robert A. Wise
Environmental Planning
City of Long Beach Planning Commission
333 W. Ocean Boulevard
Long Beach, CA 91711

RE: SCAG Clearinghouse I19990442 Rancho Los Cerritos

We have reviewed the above referenced document and determined that it is not regionally significant per Areawide Clearinghouse criteria. Therefore, the project does not warrant clearinghouse comments at this time. Should there be a change in the scope of the project, we would appreciate the opportunity to review and comment at that time.

A description of the project was published in the **October 1, 1999** Intergovernmental Review Report for public review and comment.

The project title and SCAG Clearinghouse number should be used in all correspondence with SCAG concerning this project. Correspondence should be sent to the attention of the Clearinghouse Coordinator. If you have any questions, please contact me at (213) 236-1917.

Sincerely,

J. DAVID STEIN
Manager, Performance Assessment and Implementation

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100

HARRY W. STONE, Director

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE
REFER TO FILE: P-2

October 18, 1999

Mr. Robert A. Wise
City of Long Beach
Planning Commission
333 West Ocean Boulevard, 5th Floor
Long Beach, CA 91711

Dear Mr. Wise:

RESPONSE TO A NOTICE OF PREPARATION (NOP)
RANCHO LOS CERRITOS

Environmental Programs

As projected in the Los Angeles County Countywide Siting Element, which was approved by a majority of the cities in Los Angeles County in late 1997 and by the County Board of Supervisors in January 1998, a shortfall in permitted daily landfill capacity may be experienced in the County within the next few years. The construction and demolition activities and post-development operations associated with the proposed project may increase the generation of solid waste, and may negatively impact solid waste management infrastructure in the County. Therefore, the proposed Environmental Impact Report (EIR) must identify what measures the project proponent may implement to mitigate the impact. Mitigation measures may include, but are not limited to, implementation of waste reduction and recycling programs to divert the solid waste, including construction and demolition waste from the landfills.

The California Solid Waste Reuse and Recycling Access Act of 1991, as amended, requires each "development project" to provide an adequate storage area for collection and removal of recyclable materials. The EIR should include/discuss standards to provide adequate "waste storage areas" for collection/storage of recyclable and green waste materials for this project.

The EIR needs to fully assess the impact of this project on the quality of stormwater runoff. The EIR should reference Order No. 96-054, National Pollutant Discharge Elimination System Permit CAS614001 issued by the California Regional Water Quality Control Board

to the County and local agencies. The EIR should also indicate compliance with all relevant stormwater quality management programs of the Federal, State, County, and local agencies.

North of the proposed project location, along the north perimeter of the Virginia County Club, and flowing to the southwest is Drain No. 181-130 (Bond Issue Project No. 130, Pump District No. 7) which discharges into the Los Angeles River. If any connections are made to this storm drain, a permit is required from this Department's Construction Division.

If you have any questions regarding the above comments, please contact Mr. Alan Nino at (626) 458-3564.

Traffic and Lighting

We recommend the State of California Department of Transportation and the City of Carson review this document for significant impacts/mitigations within their jurisdictions.

If you have any questions, please contact Mr. Scott Angus of our Traffic Studies Section at (626) 458-5959.

If you have any questions regarding the environmental reviewing process of this Department, please contact Mr. Scott Schales at the address on the first page or at (626) 458-4119.

Very truly yours,

HARRY W. STONE
Director of Public Works

T. Scott Schales

For DAVID YAMAHARA
Assistant Deputy Director
Planning Division

YC:dbm
A:\YC271.WPD

STATE OF CALIFORNIA—BUSINESS AND TRANSPORTATION AGENCY GRAY DAVIS, *Governor*

DEPARTMENT OF TRANSPORTATION
DISTRIC7, ADVANCE PLANNING OFFICE 1-10
120 SO. SPRING ST.
LOS ANGELES, CA 90012
(213) 897-3747 ATSS: 8- 647-3747
FAX: (213) 897-6317

October 12, 1999

IGR/CEQA/PR/990962/CP
Rancho Los Cerritos
4600 N. Virginia Road – Long Beach, CA 90807
Vic: LA-710-10.745

Mr. Robert Wise, Environmental Planner
City of Long Beach
333 W. Ocean Blvd.
Long Beach, CA 90802

Dear Mr. Wise:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the project referenced above. The Master Plan for Rancho Los Cerritos is designed to serve as a guide for site development and interpretation, and includes sections on structural and landscape restoration, maintenance, educational programming, visitor amenities, staff accommodations and collection needs. The proposed project includes development of a Visitor Center, Barn Complex, and a Caretaker's House at the Rancho Los Cerritos site.

To assist us in our efforts to evaluate and assess the impacts of the project on the State transportation system, we recommend that a brief traffic study or report that includes the following information be prepared for our review:

a) Projected traffic volumes, trip generations and traffic circulation to build-out.
b) Existing and projected AM and PM peak-hour volumes to build-out.
c) Traffic mitigation, if any to be proposed.
d) Any costs for mitigation including widening, signalization, etc. should be extended to cover Route 710 (Long Beach Freeway).
e) Cumulative affect of this project in conjunction with other development in the area.

If you have any questions regarding this response please reference IGR/CEQA # 990962 and call me at (213) 897-4429 or contact Cheryl Powell, the IGR/CEQA Coordinator for the project at (213) 897-3747.

Sincerely,

STEPHEN J. BUSWELL
IGR/CEQA Program Manager
Transportation Planning Office

COUNTY OF LOS ANGELES

FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294

(323) 890-4330

P. MICHAEL FREEMAN
FIRE CHIEF
FORESTER & FIRE WARDEN

October 29, 1999

Robert Wise, Environmental Planner
City of Long Beach
333 W. Ocean Boulevard
Long Beach, CA 90802

Dear Mr. Wise:

SUBJECT: NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT -- RANCHO LOS CERRITOS INITIAL STUDY -- CITY OF LONG BEACH (EIR739/1999)

We have reviewed this Initial Study for a Draft Environmental Impact Report for Rancho Los Cerritos Project. This project is located at 4600 Virginia Road, in the City of Long Beach. This project has been reviewed by the Planning, Subdivision and Forestry Divisions of the County of Los Angeles Fire Department. These are the results of their findings:

SERVICE RESPONSIBILITY

The subject property is totally within the City of Long Beach and does not appear to have any impact on the emergency responsibilities of this Department. It is not a part of the emergency response area of the Consolidated Fire Protection District.

The statutory responsibilities of the County of Los Angeles Fire Department Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones or Fire Zone 4, archeological and cultural resources and the County Oak Tree Ordinance. The areas germane to these statutory responsibilities have been addressed.

If you have any additional questions, please contact this office at (323) 890-4330.

Very truly yours,

Michael A. Wilkinson

MICHAEL A. WILKINSON, CHIEF, FORESTRY DIVISION,
PREVENTION BUREAU

MAW:jmb

Report on Archaeology at Rancho Los Cerritos Historic Site in Long Beach

Rancho Los Cerritos Historic Site has been registered as site LAn-696 for both possible historic archaeological associations and evidence of a site component dating back to the period 5,000 to 2,000 BC.

Secretary of the Interior's Standards for Historic Preservation Projects

Rancho Los Cerritos is a National, State and Long Beach Historic Landmark, and is listed on the National Register of Historic Places. As such, all work is guided by the Secretary of the Interior's Standards for Historic Preservation Projects. The standards include the following recommendations regarding archaeological sites and features:

Recommended:

- Retain archaeological resources intact, wherever possible
- Minimize disturbance of terrain around the property, thus reducing the possibility of destroying unknown archaeological resources
- Undertake archaeological investigations in accordance with The Recovery of Scientific, Prehistoric, and Archaeological Data: Methods, Standards, and Reporting Requirements

The Standards do not forbid ground disturbance. Instead, they provide guidelines should disturbance be necessary when performing restoration, rehabilitation or reconstruction work on a historic property.

Per the guidelines, we are required to:

- Evaluate the archaeological potential of an area if we will disturb the ground
- Properly monitor all ground disturbances on the property for possible archaeological data that could provide information relating to the history or interpretation of the property

A copy of relevant pages from The Secretary of the Interior's Standards is attached.

Potential Impact of Master Plan Construction on Archaeological Resources

In developing the master plan, in June 1998 the City and consultant team invited the State Historic Preservation Officer [SHPO] to review proposals for reconstructed buildings in accordance with the Secretary of the Interior's Standards. Then-SHPO Cherilyn Widell supported the overall master plan concepts. For the record, she noted that we should professionally excavate the area to ascertain if there is evidence of remaining foundations prior to construction of the new barn complex. It was agreed amongst all parties that all new buildings would be constructed in accordance with the Secretary

of the Interior's Standards for Reconstruction. At the time of construction, a professional archaeology firm with a historic archaeology emphasis will be hired to investigate the construction sites for both the Visitor Center and barn complex, and to monitor excavation for footings and basements.

The State Historic Preservation Officer, Long Beach Neighborhood and Historic Preservation Officer, and Long Beach Cultural Heritage Commissioners have worked with Rancho staff and our master plan consultant team in the development and review of the master plan. Before any new work is undertaken, the State Office of Historic Preservation and the Long Beach Cultural Heritage Commission will also review and approve all detailed construction plans to ensure compliance with the Standards.

Past Archaeological Work

Formal digs have taken place at Rancho Los Cerritos in 1987 as part of the Historic Structure Report, and in 1997 as part of the west wall reconstruction. The first dig was by Greenwood & Associates; RMW conducted the second dig. Detailed reports are available on each.

Other informal archaeological digs have been conducted on Rancho Los Cerritos grounds since the late 1950s. Two areas have been mapped as especially rich in historical archaeological materials. The area west of the ranch house, under the planted island, contains a circa 1850s trash pit. The area by the incinerator, north of the kitchen area, is rich in 1870s materials. Both areas will be impacted by master plan construction and will require mitigation in the form of professional archaeological investigation, as indicated above.

Other Mitigation Efforts

Rancho staff can monitor work on or immediately adjacent to the 1844 adobe. Two previous professional digs did not reveal significant findings that would automatically warrant further archaeological studies within the structure. The inner courtyard, west parking lot, picnic area and current restroom location were also severely disturbed by construction during the 1930 remodel and additions by the City of Long Beach between 1955 and 1985. These prior disturbances undermine the value of archaeological materials since the materials will not be in their original locations; however, the areas should still be monitored during construction. As allowed under the Secretary of the Interior's Standards, Rancho staff can and will monitor disturbances in these areas and a professional archaeological team will be called in should there be a significant finding.

Summary of Mitigation Plans

The proposed locations for the Cota Adobe (new Visitor Center) and barn complex are potentially rich in undisturbed archaeological artifacts and, per the Secretary of the Interior's Standards for Historic Preservation Projects,

will be professionally investigated prior to construction. Demolition work in previously disturbed areas that is required to remove the City-added patios, restrooms and west parking lot will be monitored by Rancho staff. Should significant materials be uncovered, Rancho staff will request a halt in construction until the area can be investigated by a professional archaeology firm.

Ellen Calomiris
June 1999

THE SECRETARY OF THE INTERIOR'S STANDARDS FOR HISTORIC PRESERVATION PROJECTS

The Secretary of the Interior has the responsibility to develop standards for all programs under his authority that affect cultural resources listed or eligible for listing in the National Register of Historic Places. In fulfillment of this responsibility:

THE SECRETARY OF THE INTERIOR'S STANDARDS FOR HISTORIC PRESERVATION PROJECTS have been developed for use by the National Park Service and the State Historic Preservation Officers and their staffs in planning, undertaking, and supervising Historic Preservation Fund grant-assisted projects for properties listed in the National Register.

THE SECRETARY OF THE INTERIOR'S STANDARDS FOR HISTORIC PRESERVATION PROJECTS are also used by the National Park Service when advising other Federal agencies under Executive Order 11593, and reviewing rehabilitation proposals submitted with State and local government applications for the transfer of federally-owned surplus properties listed in the National Register.

The Standards for Rehabilitation, which comprise one section of THE SECRETARY OF THE INTERIOR'S STANDARDS FOR HISTORIC PRESERVATION PROJECTS, are used by the National Park Service and the State Historic Preservation Officers and their staffs when determining if a rehabilitation for a "certified historic structure" qualifies as a certified rehabilitation pursuant to the Economic Recovery Tax Act of 1981, as amended. It should be noted that although the rehabilitation standards are included in this publication, the rehabilitation guidelines are not. This is because a separate, book-length, publication of the National Park Service entitled "The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings" (revised 1983) addresses the subject in full.

The Secretary of the Interior's
STANDARDS for HISTORIC PRESERVATION PROJECTS

DEFINITIONS

The following definitions are provided for treatments that may be undertaken on historic properties listed in the National Register of Historic Places:

Acquisition

Is defined as the act or process of acquiring fee title or interest other than fee title of real property (including the acquisition of development rights or remainder interest).

Protection

Is defined as the act or process of applying measures designed to affect the physical condition of a property by defending or guarding it from deterioration, loss or attack, or to cover or shield the property from danger or injury. In the case of buildings and structures, such treatment is generally of a temporary nature and anticipates future historic preservation treatment; in the case of archeological sites, the protective measure may be temporary or permanent.

Stabilization

Is defined as the act or process of applying measures designed to reestablish a weather resistant enclosure and the structural stability of an unsafe or deteriorated property while maintaining the essential form as it exists at present.

DEFINITIONS - Continued

Preservation

Is defined as the act or process of applying measures to sustain the existing form, integrity, and material of a building or structure, and the existing form and vegetative cover of a site. It may include initial stabilization work, where necessary, as well as ongoing maintenance of the historic building materials.

Rehabilitation

Is defined as the act or process of returning a property to a state of utility through repair or alteration which makes possible an efficient contemporary use while preserving those portions or features of the property which are significant to its historical, architectural, and cultural values.

Restoration

Is defined as the act or process of accurately recovering the form and details of a property and its setting as it appeared at a particular period of time by means of the removal of later work or by the replacement of missing earlier work.

Reconstruction

Is defined as the act or process of reproducing by new construction the exact form and detail of a vanished building, structure, or object, or a part thereof, as it appeared at a specific period of time.

Guidelines for Applying

The Secretary of the Interior's

Standards for RECONSTRUCTION

THE ENVIRONMENT

Recommended	*Not Recommended*
Retaining landscape features such as parks, gardens, street lights, signs, benches, walkways, streets, alleys, and building set-backs which have traditionally linked buildings to their environment.	

ARCHEOLOGICAL SITES AND FEATURES

Recommended	*Not Recommended*
Retaining archeological resources intact, whenever possible.	Causing ground disturbances without evaluating the archeological potential of an area. Failing to properly monitor all ground disturbances on a property for possible archeological data that could provide information relating to the history of the property.
Minimizing disturbance of terrain around the structure, thus reducing the possibility of destroying unknown archeological resources.	Introducing heavy machinery or equipment into areas where their presence may disturb archeological resources. Installing underground utilities, pavements, and other modern features that disturb archeological resources.
Undertaking archeological investigations in accordance with the Recovery of Scientific, Prehistoric,	Undertaking an archeological investigation without professional

ARCHEOLOGICAL SITES AND FEATURES -- continued

Recommended	*Not Recommended*
and Archeological Data: Methods, Standards, and Reporting Requirements (36 CFR 66 Proposed Guidelines published in the Federal Register, Vol. 42, No. 19, Friday, January 28, 1977).	guidance, or without utilizing professional curatorial techniques.

BUILDING SITE

Recommended	*Not Recommended*
Identifying plants, trees, fencings, walkways, outbuildings, and other elements that might be an important part of the property's history and development.	
Retaining plants, trees, fencings, walkways, street lights, utility poles, signs, and benches that reflect the property's history and development.	Making changes to the appearance of the site by removing old plants, trees, fencings, walkways, outbuildings, and other elements before evaluating their importance in the property's history and development.
Basing decisions for reconstructing the site on actual knowledge of the past appearance of the property found in photographs, drawings, newspapers, and tax records.	Giving the site an appearance it never had.
Providing proper site and roof drainage to assure that water does not splash against building or foundation walls, nor drain toward the building.	

PLAN

Recommended	*Not Recommended*
Reproducing the basic plan of a a building, the relationship and size of rooms, corridors, and other spaces.	Altering the basic plan of a building by failing to reconstruct principal walls, partitions, and stairways.

HISTORIC STRUCTURE REPORT

ARCHAEOLOGICAL INVESTIGATION OF LOS CERRITOS ADOBE

Prepared for:
City of Long Beach

Roberta S. Greenwood
and
John M. Foster

October 1987

GREENWOOD AND ASSOCIATES
725 JACON WAY
PACIFIC PALISADES, CALIFORNIA 90272

APPENDIX E

1. INTRODUCTION

Scope of Services

The archaeological investigation at Los Cerritos Adobe was undertaken to provide data relevant to the preparation of an Historic Structure Report and to the planning of future preservation/restoration/interpretive efforts by the City of Long Beach. In addition to contributing construction details for the architectural analysis, the research was further charged with revealing and analyzing data from selected portions of the building site to address these primary questions:

1. Can original architectural features be revealed archaeologically ?

2. Can artifact or feature patterns reveal functional divisions of the interior space ?

3. Does the demonstrated or potential significance of the resources confirm the eligibility of the structure to the National Register of Historic Places ?

As part of project planning, the archaeologists met on site with the architectural consultants to evaluate the existing fabric and determine the optimum locations for subsurface testing to recover information useful to the report objectives. Existing historical data and photographs were reviewed, and a set of questions developed to test assumptions regarding the techniques and methods of construction. The archaeological field work was explicitly limited to three units, all to be placed within the existing walls of the structure.

Theoretical Background

The archaeological field work was designed to provide information needed by the architectural consultants and the City, primarily the methods and techniques of construction and integrity of the adobe interior. Excavation was designed to permit examination of the foundations of all three wings and to test for floors, with the additional hope that there would be other cultural materials associated with the purely structural elements to provide greater insight into chronology and culture than the stones and bricks alone.

Expectations regarding the building and artifacts or ecofacts which would be associated with a secular structure built in the 1840s were based in part upon the results of comparable studies at other southern California adobes which have been excavated, notably the Bandini-Cota Adobe, built in the same decade (Greenwood, Frierman, and Foster 1983), or the Ontiveros Adobe which was slightly earlier but - like the Los Cerritos rancho - supported by a livestock economy (Frierman 1982). Traits which would be typical of the ascribed age of Los Cerritos Adobe include massive stone foundations, reflecting Mission construction techniques and, possibly, the use of neophyte Indian labor; lack of an indoor fireplace or chimney; an outdoor cooking area (ramada and horno); few entrances or windows; siting on bare ground on a slight elevation; and the application of lime plaster over a scratch mud coat on the walls. Glazing was rare in California at this time, and windows of the 1840s might simply have been barred.

Previous Investigations

Excavations have been done in the past at the two-story residence, since at least 1957 (Evans 1969:72). Rancho Los Cerritos was recorded as an archaeological site by William S. Evans, Jr., in 1974, and both the prehistoric and historical

components were designated as CA-LAN-696. Excavations were carried out by field schools on the grounds north and west of the structure over a period of many years. No comprehensive reports have been prepared, and the cultural materials are not now accessible for reference. Preliminary studies addressing portions of the total assemblage include limited examination of a small sample of the cattle bone (Evans et al. 1970), summary notes on Indian-made pottery (Evans 1969), description of the buttons (LeVine 1975:59-74), and passing mention of selected ceramics in the report of a different site (Chace 1969). Additional historical materials listed on the site record include glass, ceramics, metal objects, and clay smoking pipes. A wrought metal hasp is described in Evans 1964. One of the features sampled was interpreted as an adobe borrow pit utilized during the construction and subsequently filled with trash; the deposits are described as stratified (Evans, personal communication 1987).

A chance discovery of unusual interest and potential significance was the finding of four smooth stone disks and seven cogstones in 1930, some 2.5 feet (0.76 m) below the current surface, during trenching for plumbing or furnace installation. There is confusion about the precise location of the cache; review of the contemporary accounts suggested that the materials came from an area either in the courtyard or beneath the floor in one of the adjacent rooms (Dixon 1975). Other prehistoric artifacts noted on the site record include manos, stone scrapers and knives, and two additional cogstones were recovered during Evans' excavations outside the courtyard (Ibid.:27). There is no specific identification of the locality, but Paul Schumacher is known to have spent several weeks "exhuming remains from Indian mounds on the Cerritos rancho" in 1878 (Dixon 1974:27). The prehistoric component has been correlated with the ethnographic Gabrielino village of Tibahang-na, although occupation may have begun much earlier since cogstones have usually been associated with cultures dating as early as 5000-2000 B. C.

Organization of the Project

The excavations were conducted on March 2-4, 1987. Personnel in the field were Roberta S. Greenwood, principal investigator; John M. Foster, field director; and Gwendolyn R. Romani, A. George Toren, Steven Wakefield, June Wishner, and Donna McDevitt, archaeological assistants.

Surveying and cartography were accomplished by Foster, and all laboratory and analytical procedures by Greenwood. In the preparation of this report, the field work is described by Foster, and the artifacts analyzed by Greenwood. The results are interpreted by both authors.

2. DESCRIPTION OF THE FIELD WORK

Field Strategy

A combination of methods and techniques was utilized to achieve the objectives of this investigation. The selection of those areas to be tested was based primarily on the architect's need to examine the nature of the building's foundation and the intersections between exterior and interior partition walls. Potential unit locations were reviewed against plans and reconstruction drawings to rule out, as much as possible, areas disturbed by utilities or other modifications in the past. Sweeps with a metal detector were conducted systematically to search for subsurface concentrations which might indicate either pipes or artifact deposits. After three locations were selected as likely to be undisturbed and containing the desired information, the architect supervised the cutting away of five-foot squares in the cement flooring to expose the surfaces for the investigation. Three controlled units, one in each of the three wings, were then excavated by hand tools with total screening, processing, and laboratory analysis to recover artifactual and faunal materials, examine stratigraphic profiles, and define structural remains.

Excavation Units

Three controlled units were excavated, with all soil screened through 1/4 in mesh. The dimensions were: Unit 1 - 1 x 1 m; Unit 2 - 1 x 1.4 m; and Unit 3 - 1.4 x 0.6 m. The difference in unit size reflects the constraints of the building and the project objectives. They were dug in arbitrary 10 and 20 cm increments, depending on their location, except where there was justification for stratigraphic levels. The initial level for the units was 10 cm where floors and other possible features would most likely be encountered. The lower levels were generally 20 cm due to the paucity of recovered materials. The locations are indicated on Figure 1, and other pertinent data presented in Table 2.1.

Table 2.1. Unit Details

Unit No.	Location	Area m^2	Max. Depth	Volume m^3
1	south wing	1.00		1.10
2	east wing	1.30		0.39
3	north wing	0.96		0.96
Total		3.26		2.45

The purposes, and thus the placements, of the excavation units were related to the adobe. Their distribution was conditioned by the desire to maximize the data recovered during a limited test program, the need to examine different locations within the structure while not affecting its stability, and to conduct the study with minimum disturbance to the staff and visiting public.

Laboratory Methods

All earth was screened through 1/4 in mesh on the assumption that no material significant to the architectural objectives of this test would be lost through this size. All residue in the screens was bagged, labeled, and returned to the laboratory for washing and sorting. Analysis is based upon a functional classification, e.g., subsistence remains, table ceramics, building materials, etc.

All shell has been identified, weighed, and discarded, but all animal bone has been retained for future analysis. Samples of wood, plaster, mortar, brick, and tile were provided to the architectural consultant, and examples saved. All ceramics and nails have been catalogued and retained; the fasteners from the same level of a single excavation unit are batched under one catalogue number. Amorphous metal beyond any hope of identification has been weighed, recorded, and discarded. All bottle necks, bases, or embossed fragments have been catalogued

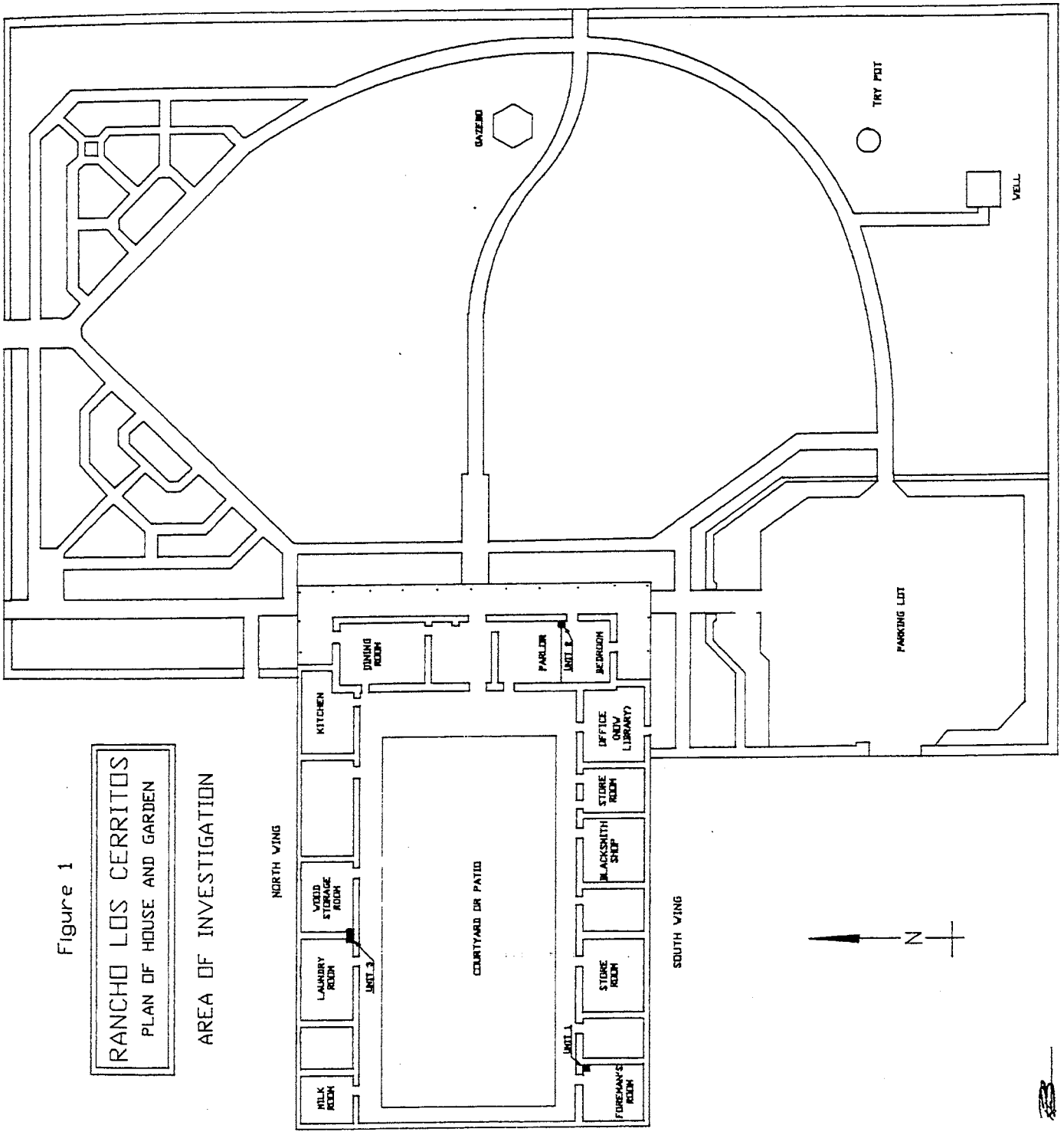


Figure 1

RANCHO LOS CERRITOS
PLAN OF HOUSE AND GARDEN

AREA OF INVESTIGATION

and saved; small fragments were sorted by color, recorded, and discarded. Although technical studies are beyond the scope of this investigation, soil and adobe samples were recovered in the hope that pollen analysis may be possible in the future.

The cultural materials, together with catalogue, field notes, level records, and photographs, have been returned to Rancho Los Cerritos, City of Long Beach, for curation, future reference, and interpretation.

3. DESCRIPTION OF THE STRUCTURE AND UNIT EXCAVATIONS

Beyond the first concerns of measurement and mode of construction, a primary question was whether the walls of the central two-story adobe and its wings had foundations of stone or fired brick. A second set of questions pertained to the contemporaneity or sequence of construction for the three elements of the building. Descriptions of each unit provide the data upon which the conclusions are based.

Unit 1: Unit 1 was situated in the northeast corner of the westernmost room of the south wing, presently interpreted as the foreman's quarters. The location was chosen to determine if floors were present and to examine the nature of the foundation in the most remote portion of this wing where an exterior wall joins an interior partition.

A concrete floor had once been installed, but had been removed in the past to repair a water leak in the room and replaced with a compacted earth surface. The uppermost 4-5 cm of tamped earth was interpreted as overburden and was not screened. The presence of modern artifacts indicated that the soil was disturbed. Between 5-8 cm below the surface, a second hard surface was encountered which contained glass, bone, and ceramic fragments. The presence of artifacts suggested it was a floor.

The presence of a floor called for caution in excavation, and the next two levels were dug in 5 cm increments. By 20 cm, no further evidence of floors had been uncovered, and 10 cm levels were reinstituted. From 20-50 cm, the levels were characterized by pervasive rodent and root disturbance. The roots were larger with depth and averaged 2 cm in diameter at the bottom of this zone. Cultural material within these levels included nails, glass, and marine shell. In addition, there were jumbled and

fragmented adobe bricks along the north wall of the unit, juxtipositioned to suggest that they had fallen from the top of the wall.

From 50 to 110 cm, below any evidence for floors, excavation continued in 20 cm levels to expedite reaching the base of the wall. At approximately 100 cm a soil change was observed, which subsequently was determined to be the lowest course of adobe bricks (Figure 2). The base soil consisted of a reddish sandy clay, well defined in contrast to the gray and tan of the adobe bricks and mud mortar. The walls were scraped back and the base of the walls was probed to determine if either brick or cobble foundations was present. Neither was found.

Unit 2: This unit was located in the main adobe parlor adjacent to the east exterior wall, just south of a temporary partition. A hardwood floor and concrete slab had been removed prior to excavation. The unit was begun as a 1 x 1 m square, but later was expanded 0.4 m east to expose the interior face of the exterior wall. The unit was excavated in 10 cm levels to a depth of 30 cm with all materials dry screened.

The uppermost 8 cm revealed a probable adobe wall running east-west across the unit. This was found by removing all loose materials from the surface, which exposed a linear alignment of adobe bricks, laid in stretcher bond, upon a compacted earthen surface. The bricks were approximately 2-3 cm below the overburden surface. The wall was 30 cm wide and 5 cm thick. There was one area where a differential color and texture suggested the presence of mortar between the bricks, but it was too amorphous to confirm.

Paralleling the adobe wall remnant, north side, was a redwood beam (8 x 15 cm) set in a 16 cm wide trench of loose fill and containing fragments of adobe bricks. The beam extended 4 cm into the east exterior wall, but did not appear to have been

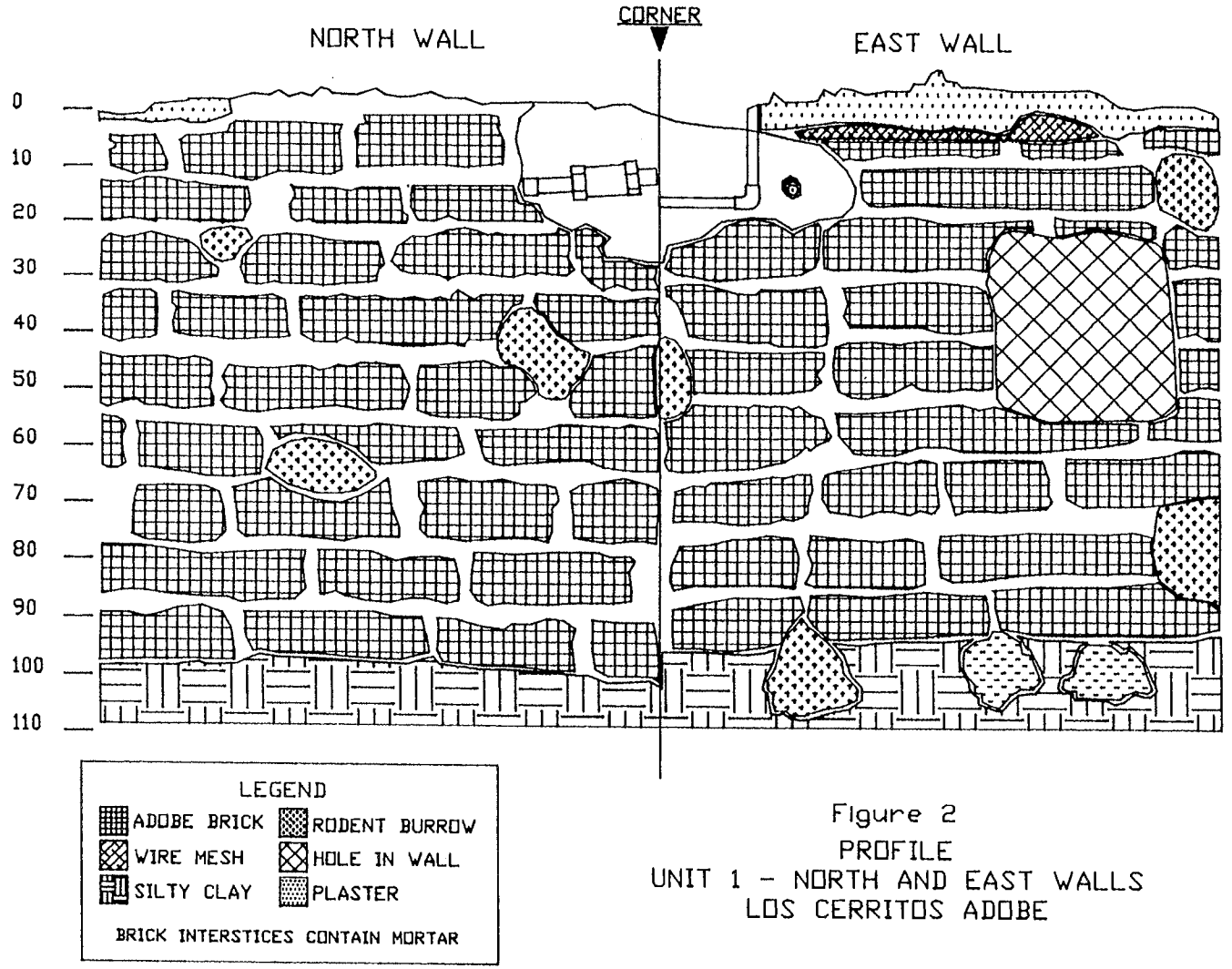


Figure 2
PROFILE
UNIT 1 - NORTH AND EAST WALLS
LOS CERRITOS ADOBE

cut into the adobe bricks of the the east wall. The wood beam appears to have been a floor joist, although there was no evidence of nails (or nail holes) that would have secured floor planks.

On either side of the beam and adobe bricks was a very hard surface. After removal of the beam and bricks, the excavation was continued. Historical materials sharply decreased in subsequent levels, while Native American flaked stone increased. The soil was hard and compact, characterized by a light brown color and silty clay texture. By approximately 30 cm historical cultural materials were absent, although flaked stone continued to be recovered. In the interest of pursuing the primary objectives, screening was discontinued and the east side of the unit was extended to meet the exterior wall. Unfortunately, the concrete apron, adjacent to the east wall of the building, only permitted inspection of the bottom half of the lower course of the exterior wall. Nevertheless, this permitted a reduced but accurate examination of this wall. The profile revealed that the adobe bricks of the interior partition interlocked with those of the exterior wall. To accommodate the interlocking brick of the interior wall, a brick in the northern exterior had been reduced by half.

Unit 3: The purpose of this unit in the north wing was to obtain a plan view of a postulated interior partition wall where it was presumed to join an exterior wall on the courtyard side. That a transverse wall had existed in this location was predicted from extrapolation of early floor plans and arches at the ceiling level interpreted as remnants of this wall. In 1930, a portion of the wall was removed to facilitate passage, leaving a relict archway at the ceiling. The gap provided an opportunity to gain a plan view and profile of a former wall and evaluate the stacking pattern of its bricks (Figure 3). Due to the constraints of space within a narrow hallway, the unit was 60 x 140 cm in surface dimension.

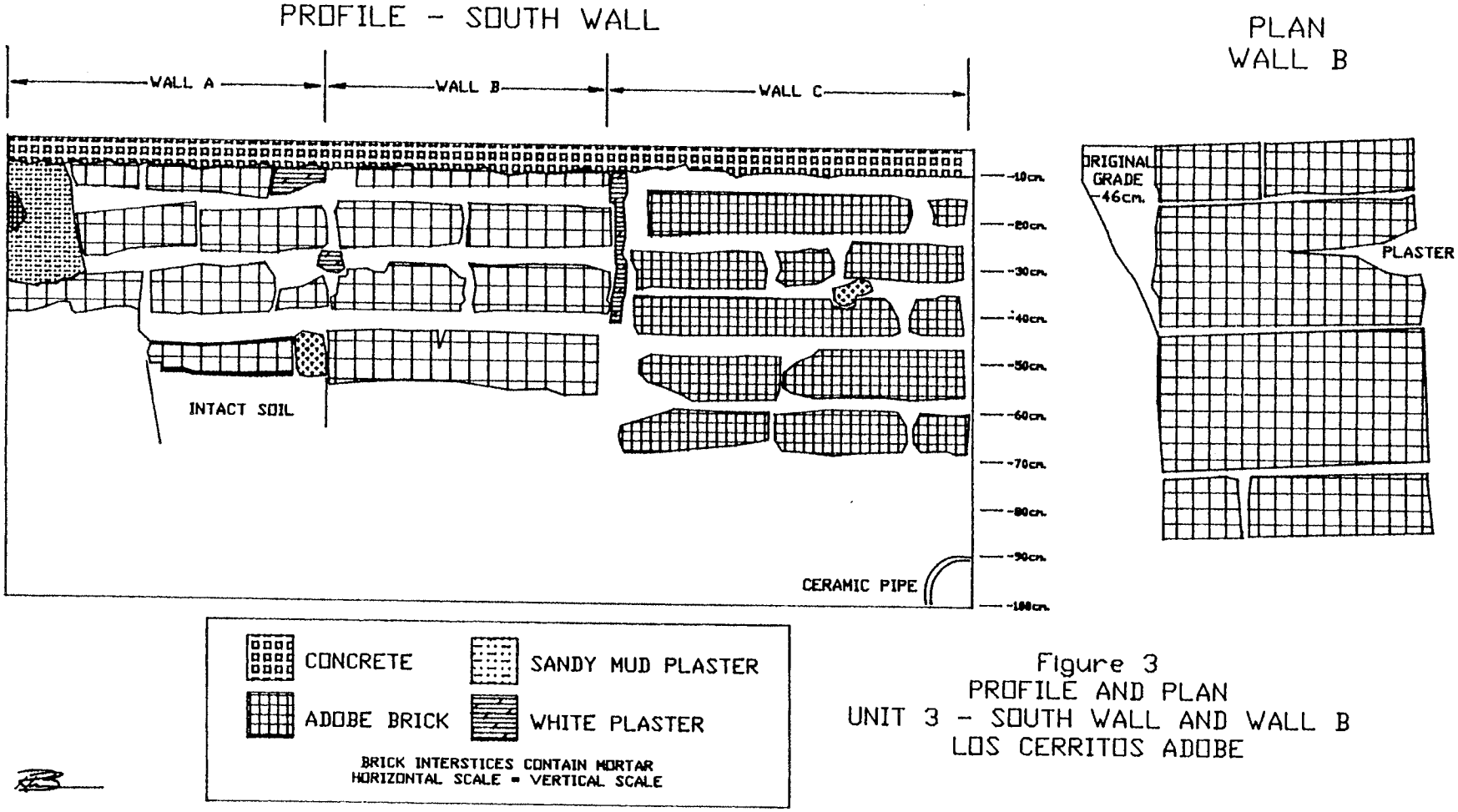


Figure 3
PROFILE AND PLAN
UNIT 3 - SOUTH WALL AND WALL B
LOS CERRITOS ADOBE

Initially, the upper 30 cm consisted of disturbed rubble, characterized by fragmented adobe bricks and historical artifacts. At 30 cm adobe bricks, oriented north-south, were encountered across the center of the unit, representing a wall approximately 60 cm wide. Rubble was recovered on both sides of the wall until a compacted surface was encountered at 110 cm on the east side and 120 cm on the west side. At this depth an indurated clay surface constituted the base stratum. Whitewash was present on the west side of the wall, although none was found on the east side. Shaving the west side of the interior wall indicated that the whitewash only extended down for a single 10 cm course. This places the whitewash 30 cm below the current wood floor. It was noted that under the first course of bricks was a fine silty soil approximately 0.5 cm thick and may represent some type of mortar. The south side of the unit was expanded into the exterior wall to examine the joining.

Examination of the exterior wall bricks revealed differences between those east and west of the partition wall. Those east of the interior wall were a medium gray-brown with flecks of lime. The size appears to be similar to others observed, 10 x 30 x 56 cm, and they are laid in header bond. The mortar is a brown clay, measuring 2 - 6 cm thick. A single coat of coarsely applied whitewash was found on the mud plaster. The bricks found in the interior wall did not appear to interlock with the east wall. Observations were hampered by the limited exposure and fragmentary nature of in situ bricks.

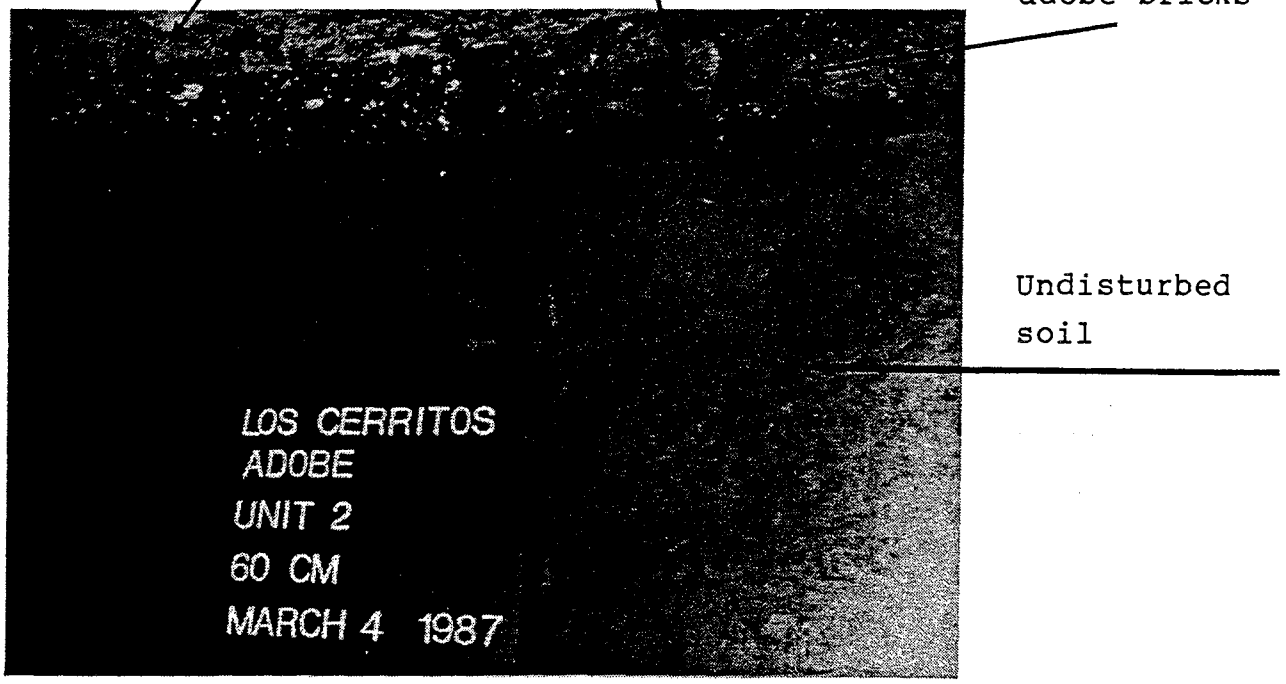
The bricks on the west side of the interior wall were distinctly different. These were dark gray and bonded with a dark brown mud mortar. The size of the adobe bricks is 10 x 30 x 56 cm, and they are laid in alternating courses of header and stretcher bond. The thickness of the mortar averages 5 cm. The base course of the wall does not contain any evidence of mud plaster. However, excess mud mortar appears to have extruded, filling the

shallow trench dug to set the bricks. Whitewash was found over the mud plaster in various locations on this wall. The whitewash is identical to that found on the east wall section.

Foundations

A primary objective of the study was to determine the nature of the foundations for the adobe and wings. It had been reported (Smith 1974:62) that John Temple had brought fired bricks around the Horn from the eastern United States for his walkways and building foundations. This had never been tested or confirmed. The exposed profiles of these walls indicated that there were no foundations whatever (Figure 4). All three units, which had been strategically placed to expose corners of different walls, demonstrated that shallow trenches had been dug and the adobe bricks laid within them directly on the earth. There were no cobble or fired brick foundations.

Figure 4. East wall of Unit 2



Plaster and Mortar

Plaster was found primarily in Unit 3, some of which had traces of blue paint on the whitewash. The plaster ranged from 2 to 5 cm in thickness and was applied over a medium brown mud coating (1.5 to 2.0 cm thick). Mortar was similar in color to the adobe bricks, except in the basal courses of Unit 3, and averaged 4-6 cm thick. In Unit 3, Wall C, it appeared that the basal two courses of adobe bricks were set in a dark brown mud mortar. The basal courses in Units 1 and 2 did not show any evidence of mortar.

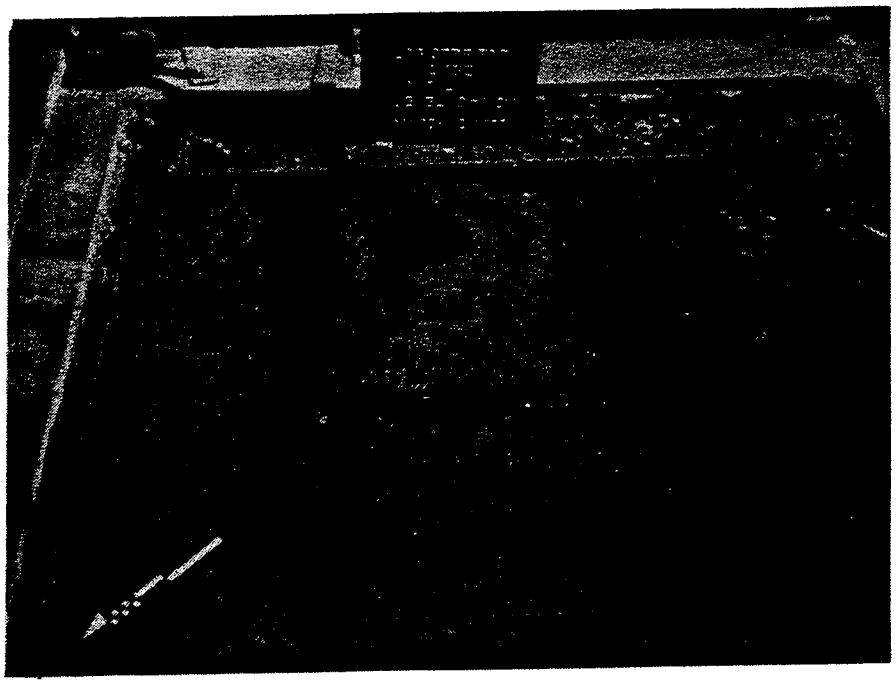
Sequence of Construction

The second question, regarding the sequence of construction, proved to be more elusive, although new information was obtained. The profile of Unit 3 (north wing) revealed a possible maximum of three chronologically separate walls. The north-south wall appeared to have a cold joint with both the east and west extensions. In addition mud plaster and whitewash were found adhering to the west side of the center wall. This plaster was also present where the west wall joined the interior north-south wall. The eastern extension also appeared to be a cold joint with the interior wall, although this was less clear than the west wall extension.

Evidence from Unit 3 (north wing) indicated that the interior wall of the room had been built first. Although the data are inconclusive, the east wall may also have been built at the same time. The section of the wall west of the interior wall was definitely added at another time; whether it was days or years is unknown. This conclusion was based on the presence of a cold joint, the presence of whitewash and mud plaster within the joint of the two walls, and marked differences in adobe brick color and constituents. These facts suggest that the two walls were built at different times (Figure 7).

Evidence of contemporary construction of inner and outside walls was found in Unit 2 (east wing), located in the center of the adobe's main parlor. An interior wall known to have existed in this location, but since razed, was relocated (Figure 5). The bottom course of this partition wall was found in situ, and it was revealed to interlock with the exterior wall.

Figure 5. Remains of Interior Wall



The investigation revealed unanticipated evidence that the west end of the north wing was an addition, and further suggests that the south wing had also been extended. In addition, it is possible that the interior wall and possibly the north exterior wall of the wing may have originally represented the courtyard perimeter. These sections might have been later enclosed and roofed. If the wall section east of Unit 3 (north wing) did interlock with the interior wall, then it is probable that the north wing was originally intended as a structure. If so, then

the interior wall may have once extended south all the way to join the south wing. That the interior north-south wall was once an exterior wall is also suggested by the lack of original openings or passageways in the wall. Although the wall has been cut away twice, once for a closet and secondly to extend the hallway, neither appears to resemble other openings in the wing.

The presence of tar nodules in Unit 1 of the south wing suggests that brea may have been used to cover an early roof. Early photographs (Smith 1974:47) illustrate that the wings originally had flat roofs. If these were covered with pitch, and both the north and south wings had been extended as the archaeological data seem to imply, then the period of expansion must have been relatively early, as opposed to the 1930s when the known renovations took place. This would have been during a time when the roofs were flat, and prevailing custom was to seal them with asphaltum and sand, as opposed to tiles or shingles.

4. CULTURAL MATERIALS

Domestic

Ceramics

Ceramic fragments provided a tantalizing array of wares and types typical, for the most part, of the nineteenth century with only a few sherds possibly representing the first decades of the twentieth century. There were no whole vessels, and no impressed marks or backstamps.

The earliest specimens are probably the two pieces of blue edged pearlware, and one example each of Majolica and Chinese porcelaneous stoneware. The blue decorated ware is feather edged, hand painted from the rim toward the well. Both are plate rims, although not necessarily from the same plate; catalogue number 42 was recovered at 90-110 cm in Unit 1, while no. 74 was found in Unit 3, while clearing the rubble around the partition wall. The Majolica sherd is very small, creamy glazed over a tan body, with no pattern on the fragment (2; Unit 1, 0-5 cm). The Chinese piece is the rolled (outward) rim of a rice bowl, grayish-blue glaze on a very fine gray body, hand painted in blue under the glaze (6; Unit 1, 0-5 cm). The pattern is a floral element typical of South Provincial Chinese decoration variously called Swatow or Blue Flower. It is a ware used by Overseas Chinese, not Export porcelain which was shipped for sale to Euroamericans. There were at least two Chinese employed at Los Cerritos in the 1870s-1880s, and other Chinese artifacts recovered by the field schools included stoneware food containers, porcelains, glass medicinal vials, and coins (Evans 1978). Also from Unit 1, 0-5 cm, is a tiny rim sherd (1), probably a plate decorated in very dark flow blue, typical of the same period.

Of later origin are two decal-decorated rim fragments. One was probably a cup (4; Unit 1, 0-5 cm) with a narrow black band

broken by an urn in resist, further embellished with gilt, on the exterior surface. The other is the molded earthenware brim of a plate or soup bowl, with a polychrome floral motif of small purple flowers and green leaves (79; Unit 3, rubble). A white porcelain knob, probably from a tureen or covered vegetable dish, is 3.5 cm in diameter and 2.5 cm from the point of attachment (75; Unit 3, rubble). Seven nondiagnostic whiteware fragments, one porcelain, completed the ceramic inventory. Their provenience reflects the same distribution as sherds described above: three from Unit 1, 0-5 cm, and four from Unit 3, rubble around the wall.

Comparable feather edged sherds were recovered during the field school excavations outside the courtyard, along with a blue transfer print made in France, an overpainted green transfer print, and a handpainted polychrome floral (Chace 1969:44-46). An unpublished summary mentions the following types as present:

> ...striped slipped ware, a variety of transfer printed wares, hand painted flowered "Continental Peasantry ware," blanket stitched and embossed white wares, some undecorated sherds - all earthenwares, and two sherds of porcelain, one of which was Oriental [Chace n.d.:4].

The deposit which contained these materials was tentatively dated to ca 1850-1860. The backstamp on one unprovenienced fragment at Los Cerritos has been identified as the product of Pinder, Bourne and Hope, a British firm operating 1851-1862 (Godden 1964:495).

Glass

Identifiable glass artifacts were rare. One fragment of a milk glass canning jar lid liner (76) was recovered from around the wall in Unit 3, and an aqua shoulder fragment of what was most likely a canning jar (20) in Unit 1, 15-20 cm. A curved, cut or pressed, decorative clear glass vase or other vessel (19) came from the same level of Unit 1. The only recognizable bottle

finish was a small, broken patent lip, no greater than 1.5 cm in diameter (10; Unit 1, 0-5 cm); it appears to be sun colored amethyst.

All small, nondiagnostic shards were sorted by color, and by type where possible, e.g., container or window pane, and were then discarded. Container fragments amounted to only 30.7 g in Unit 1 and 22.4 g in Unit 3. Colors represented in Unit 1 were clear - 26.8 g; olive - 1.1 g; brown/amber - 1.4 g; and aqua - 1.4 g. In Unit 3, 0-10 cm, there were 0.4 g of lamp chimney glass, 1.7 g of clear bottle glass, and 0.6 g of olive shards; there were 2.8 g of clear container glass in the 10-20 cm level, and from the rubble around the wall: olive - 12.2 g; clear - 4.6 g; and amber - 0.1 g. This low recovery implies that glass containers were perhaps rare in the early occupation of the adobe, and that subsequently, they were systematically discarded in one of the known trash pits outside of the courtyard.

Personal

One shell button (37; Unit 1, 70-90 cm) represented an early, pre-industrial type, well decorated but crudely made with the natural outer layer of the shell present on the back. It is 1.1 cm in diameter, with an incised line around the edge, raised center, and two perforations in a central fish-eye. The only other clothing fastener was half of a nickeled safety pin (82; Unit 3, rubble).

In a previous summary of 145 buttons from the site, 45 or 31 percent were made of shell. Eight of these had two perforations; the example illustrated had a fish-eye (LeVine 1975:59-74), but lacked the additional detail of the button described above. It was the author's conclusion that the shell buttons were used on better quality garments, and that they may reflect the Temple occupation.

Related to sport, self-defense, or subsistence was a single cartridge casing (81) from the Unit 3 rubble around the wall. It is a rimfire, .22 short, headstamped "P" for Peters Cartridge Co.

Architectural

Considering the age of the structure and documentation of several phases of alteration, it is perhaps surprising that only 45 nails were recovered. Cut nails predominated by a ratio of 2:1 (Table 4.1), but all were either too corroded or fragmentary to determine pennyweight.

Table 4.1. Distribution of Nails

Provenience	Cut	Wire	Other	No ID	Total
Unit 1					
0-5	2	2	1 tack	2	7
5-15	-	-	-	-	0
40-50	3	-	-	-	3
50-70	1	-	-	-	1
70-90	4	-	-	-	4
90-110	1	-	-	-	1
Unit 2					
8-10	6	6	4 tacks	7	23
10-20	-	-	-	1	1
Unit 3					
Wall rubble	5	1	-	-	6
Total	22	9	5 tacks	10	46

Where provenience could be ascribed, round wire nails were restricted to the uppermost levels of Units 1 and 2. In the former, cut nails were recovered from the surface to 110 cm, perhaps evidence for repeated modifications from an early date. In Unit 2, the abundance of round wire nails and tacks may be

related to the installation of comparatively recent flooring on the joist which was discovered.

Window pane glass was present in all units: 10.1 g in Unit 1; 1.6 g in Unit 2; and 1.8 g in Unit 3. It was green-tinged when viewed in cross section only in the upper 0-15 cm of Unit 1; these fragments averaged 1.9 to 3.0 mm thick. The balance of the pane glass was colorless in section, ranged in thickness from 1.6 to 2.0 mm, occurred in the 40-50 cm of Unit 1 and in the rubble around the wall in Unit 3, and is presumed older.

Nodules of asphaltum were recovered from Units 1 and 3, suggesting use in the earlier, flat roofs of the two wings. Traces of blue paint were observed applied over the whitewash (68) in the rubble fill of Unit 3. A wrought iron door hasp was described by Evans (1964).

Subsistence

All shell and bone fragments were weighed (Table 4.2). Of the shell, 77 percent of all identifiable fragments were speckled scallop (Argopecten aequisulcatus). Other species present, in descending order of abundance, were California chione (Chione californiensis), wavy chione (C. undatella), San Diego scallop (Pecten diegensis), single specimens of red abalone (Haliotis rufescens) and bean clam (Donax gouldii), and fragments which may represent bubble shells (Bulla gouldiana ?). With the exception of the abalone, all are species typical of mud or sandy bottoms of bays or lagoons, and would have been gathered locally. One fairly large piece of pecten was observed embedded within an adobe brick in Unit 1 (14, 0-5).

The bone has not been analyzed, but includes specimens attributed to cattle (some sawed), birds, and rodents. Bovine elements include long bones, ribs, vertebrae, and one astragalus. Sheep

bone has been emphasized in earlier descriptions (Evans et al. 1970).

Table 4.2. Weight of Shell and Bone

	Shell		Bone		Excavation	
	Grams	%	Grams	%	m^3	%
Unit 1	48.5	61	353.9	63	1.10	45
Unit 2	5.5	7	37.3	7	0.39	16
Unit 3	25.8	32	170.4	30	0.96	39
	79.8	100	561.6	100		

Interpretation of the relative quantities must consider the different volumes excavated in each unit. It is notable, first, that the total weights of bone and shell in each unit, expressed as a percent of each class total, appear at least superficially the same (Table 4.2). Yet, there is a significant difference between the quantities recovered and the amounts predicted from the relevant volume of each excavation unit. There is substantially more shell and bone in Unit 1, and less of both in Unit 2; the quantities in Unit 3 are only slightly lower than predicted from the unit volume. In Unit 1, both shell and bone were present from surface to termination at 110 cm; the greatest content in the unit (92.8 g) was actually recovered at 90-100 cm. The highest yield was 149.6 g contained in the rubble fill around the wall in Unit 3.

Other than intrusive rodent bone, the fauna are interpreted as historical, and the proportions suggest that butchering, consumption, or both, took place in the area of Unit 1, either before or after this room was constructed. The bone in Unit 3 is closer to the historical location of the kitchen, but because of the disturbance caused by the wall discovered in this unit, it cannot be determined from evidence to date when the remains might have been discarded.

More than half of all shell occurred in Unit 1, possibly an addition to the original structure. This may represent consumption by the Indians then living in the vicinity, and some part of all the shell may have been incorporated into the making of adobe and calcining of shell for mortar. Interpretations are tentative at this stage in the research, since the lowest proportion of shell occurred in Unit 2, which contained the greatest number by far of all worked stone flakes (Table 4.3).

Prehistoric

Although each of the three units contained at least one stone flake, these were most abundant in Unit 2 (Table 4.3), where the volume excavated was by far the lowest. The flakes were typically small, all 2.6 cm or less in length, and most were chert. Almost all were unifacial, interior (tertiary), and could represent byproducts during tool manufacture or maintenance. The totals presented in Table 4.3 refer to such flakes, except as indicated by asterisk and discussed below.

Table 4.3. Distribution of Worked Stone

Provenience	Chert	Chalcedony	Steatite	Total
Unit 1				
30-40	1	-	-	1
40-50	1*	-	-	1
90-110	1	-	-	1
Unit 2				
0-8	1	-	-	1
8-10	2	-	-	2
10-20	19	3	1*	23
20-30	11	-	-	11
30	1*	-	-	1
Unit 3				
Rubble	-	1	1	1
Total	37	4	1	42

* = see text below

The flake from Unit 1, 40+ cm (94), shows bifacial workmanship and may be a preform, reject, or artifact broken during manufacture. The steatite fragment from Unit 2 (87) is a tiny crumb, lacking ground or finished surfaces, but represents an imported lithic material prized by the Indians. The example with the most workmanship (95, Unit 2, 30 cm) is bifacially flaked of a mottled black/brown/white chert; the break is old, but the artifact may have been a blade or large projectile.

Although none was recovered during this investigation, it should be noted that many examples of locally made Indian pottery were recovered from the earlier excavations outside the courtyard. Called Cerritos Brown, in the Tizon Brown Ware series, the collection included a large olla, hemisphere shaped bowls, a small globose jar, small clay balls, a finger-molded vessel, and fragmentary figurines (Evans 1969:71-78). The quantity was reported as "impressive."

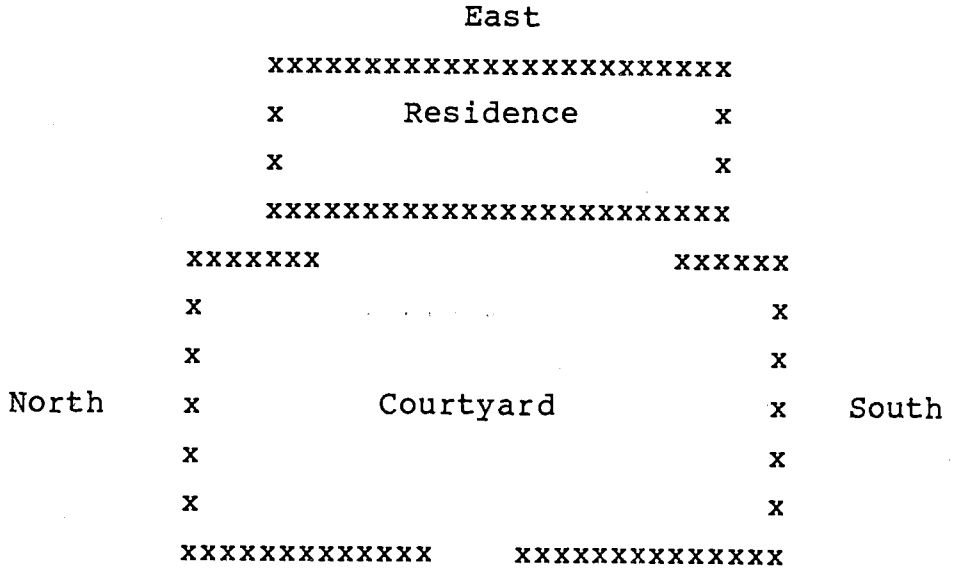
5. CONCLUSIONS

Summary

Differences in the composition, size, and bonding of the adobe bricks and the cold joints between various walls led to the conclusions that: (a) the present north wing of the adobe had been extended subsequent to the original construction; and (b) the interior wall in Unit 3 may once have been part of the courtyard enclosure and only later incorporated into rooms or, alternately, it may have at least anchored the north end of the courtyard wall.

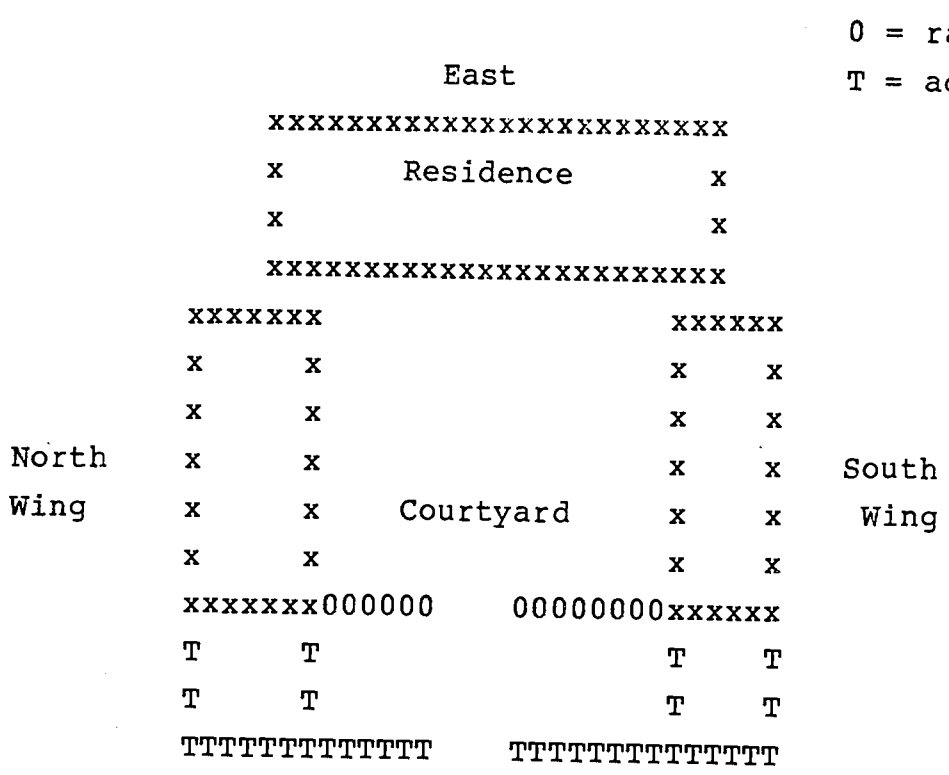
It is probable that the main two story adobe was built first. Then either a courtyard wall was built (Figure 6), or the two wings were constructed (Figure 7). If only the wall had been built, then it was later enclosed and roofed to form the north and south wings. At some later time the north and probably the south wings were extended to create more rooms as depicted in Figure 1.

Figure 6. Scenario 1



In this scenario (Figure 7) the older courtyard wall is prepresented by "0" and is razed. The westerly extensions are added to the wings "T" and a new courtyard wall is built "T".

Figure 7. Scenario 2



The investigation demonstrated that architectural features can be revealed archaeologically. Neither historical nor architectural research had yielded any suggestion about the lack of foundations, possible additions to the wings, the original size and configuration of the courtyard, nature and sequence of historical modifications, or other details not available in the existing documentation. Historical photographs do suggest alterations in the northeast corner of the courtyard where an opening in the north wing seems to lead to a carriage shelter, and that the courtyard was once shorter from west to east, although perspective would need to be verified through photogrammetry. Early pictures confirm that the wings once had flat roofs.

Although the phenomenon is relatively rare, Rancho Los Cerritos is not the only adobe built without any demonstrable stone or brick foundation. At the Casa de Pedrorena in Old Town, San Diego, the main portion of the adobe which dates from the 1860s was built on a stone footing, but a one-room extension, assumed to be a later addition, lacked a foundation and, in fact, failed (Glenn Farris, personal communication 1987). Details of a test excavation are not precise, but apparently De La Osa Adobe at Los Encinos State Historical Monument lacked foundations altogether:

> Digging disclosed that the adobe has no foundations. The lowest course of sun-dried bricks rests directly on the hard ground with no special footing and apparently without a mortar bed [Wallace 1962:179].

The Martin Adobe in San Bernardino, built in 1856-1857, does have a stone foundation, although in a Mormon adaptation, it has very thin walls and nine-inch adobe bricks (Peter Schulz, personal communication 1987). The Aros-Serrano Adobe in Riverside County, built by a Mexican family ca 1860-1870, also has a stone footing, although the interior floor plan has Anglo elements (Greenwood, Foster, and Duffield 1987). In San Diego, an unidentified small adobe behind the Colorado House (a wood frame hotel), possibly a cold house or used for storage, had no foundation; it was built at an unknown time after the 1850s and prior to 1872 (Peter Schulz, personal communication 1987). At the Rose-Robinson site in San Diego Old Town, excavation demonstrated a number of stone foundations variously interpreted as footings for the wall which once enclosed the plaza, fill for a sewer trench, and possible remains of a dwelling gone by 1849; however, the adobe walls of the large two-story structure built by American-born James Robinson ca 1853 were laid directly on the ground with no cobble footing whatever (Schulz, Quinn, and Fulmer 1987:12).

At this stage in adobe research, there is not yet any consistent correlation between the presence of foundations and either cultural tradition, i.e., Anglo or Hispanic building practise, or chronology. These, and any possibility of regional tradition or diffusion, are only the more obvious directions for inquiry; as the century progressed, there would be less Indian labor available, and fewer surviving Indians who had experience or training at the missions. Those who came to California from the east or midwest had other traditions even if, as the Mormons, they chose to build with adobe. Suitable stone may have been more or less readily available in different areas.

Yet, the lack of a foundation at Los Cerritos is an exception to the prevailing tradition in early California, and contrary to sound construction practices which usually raised the permeable, water-soluble adobe bricks above the surface level. It is apparently a fairly early example of this transition and demonstrates, once again, that the great variability among adobe structures underscores the danger of assuming any conclusions without sound evidence.

The test excavation was too limited to correlate with any certainty the high proportion of bone recovered in Unit 1 with possible consumption in a room said to have been occupied by the ranch foreman. Whether the faunal remains were deposited before or after this room was built, the percentage of all bone from this unit significantly exceeded the predicted distribution. It would be tempting to relate the next highest abundance, in Unit 3, to proximity with the kitchen of the family residence, but the proportion is congruent with the unit volume and the area has been greatly disturbed. The percentages of total shell and bone recovered from Unit 1 (61 and 63 percent, respectively) at least suggest that this area was utilized, and the food remains deposited, before the room was built.

Evaluation

The archaeological resources have the qualities of integrity and scientific research potential sufficient to meet the criteria for eligibility to the National Register of Historic Places. The walls and features are undisturbed and unmixed, and have already provided important information about the chronology and sequence of developments affecting the adobe. Future efforts may yield a very precise chronology of the structure's architecture, maintenance, and remodeling. There are known subsurface features and cultural deposits dating to the rancho period outside the structure which were discovered by the field schools, but which have never been systematically excavated or analyzed. One of the two trash features sampled is said to be older than the other; it has been suggested that materials from the earlier deposit, believed to be an adobe borrow pit used during construction, may be associated with the Temple family, while the other feature, in a natural drainage area, may have been used by the Bixby family for their discards after 1866 (LeVine 1975:72; Evans, personal communication 1987). Although individual artifacts recovered during this limited investigation were both few and fragmentary, they could be correlated with the very large assemblages from outside the courtyard to yield fairly precise data about the sequence of construction and alteration, and associations with specific families. They have the continuing potential to reveal insights into the lifeways, subsistence patterns, economic status and endeavors, and degree and direction of acculturation of two of the most prominent California pioneer families, and into the persistence of Native American traditions in a situation of culture contact.

Recommendations

The unanticipated complexity of the structural remains will challenge and complicate the City's objectives of preserving and interpreting the adobe. Yet, if the technical problems can be

solved, the opportunity to display the sequence and methods of construction will provide a unique experience to the visitors. Since the key aspects of the architecture are indoors, it should be possible to develop a number of protected exposures which will display not only the methods and sequence of construction, but illustrate how these conclusions were reached. It is suggested that selected segments and intersections of the walls should be left open for public viewing, perhaps under protective, transparent cover.

While this investigation was focused toward objectives which mandated small, dispersed test units, any future excavations should consider broad block exposures for better understanding of the wall articulations, nature of possible feature depositions, artifact associations and activity areas, the interpretation of the original gradient, and further testing of the architectural conclusions. To assess the postulates developed about the wings, it will also be necessary to examine key areas of the current walls below the modern surfacing.

In any future excavations, it is recommended that soil samples be subjected to flotation to recover small plant parts or seeds; fish bones, scales, or otoliths (ear stones); or other small cultural material which may further illuminate the subsistence pattern, prevailing environment, and ranch activities.

Another analytical technique which could contribute to a fuller interpretation of this building is the identification of plant pollens contained in the adobe bricks, which will permit a technical comparison of the mud and water used to make the bricks in the two-story residence, the courtyard wall, and both phases of the wing(s). The identification of pollens has proven to be a very sensitive indicator of the sequence and chronology of wall-building, as well as of the replacement of native vegetation by introduced crops and range grasses. It could determine whether the various walls were contemporary, and could

possibly provide an absolute sequence for the successive phases of construction and further relate specific floors to the adobe bricks. Significant areas to be tested could be accurately defined by photogrammetry, based on historical photographs.

All of the Los Cerritos property inside or outside the adobe should be regarded as sensitive for cultural remains, and even minor impacts on the surface should be monitored closely. Indoors, architectural remains such as the joist, adobe bricks, and wall plaster were found just beneath the modern wood and concrete flooring. Before any grading, construction, subsurface repairs or installations, or other intrusions below current grade or floors take place, the location should be evaluated for cultural resource sensitivity; tested, if necessary; and unavoidable potential impacts to cultural resources mitigated by scientific data recovery. Two subsurface deposits and a possible brick foundation outside the structure have already been identified by Evans, the location of the barn is known, and additional features and perhaps more structural remains may be present.

The contents of the trash pits sampled by the field schools should be catalogued and analyzed; the information contained is relevant to analysis of the structure, its rehabilitation and interpretation. Cultural materials exposed during grounds maintenance should be collected with a record of their location, and curated until professionally identified and evaluated. Policies and procedures for accession, cataloguing, and curation should be developed.

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AUTHOR: Ronald M. Bissell

DATE: March 1997

TITLE: **Cultural Resources Research in Support of the Rancho Los Cerritos Seismic Upgrade, Long Beach, Los Angeles County, California**

SUBMITTED BY:
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SUBMITTED TO:
The City of Long Beach
Rancho Los Cerritos Historic Site
4600 Virginia Road
Long Beach, California 90807

PROJECT NUMBER: 95-1124

MAP: USGS Long Beach, California 7.5 Minute Quadrangle 1964, Photorevised 1981

ACREAGE: Less than one acre

KEY WORDS: Los Angeles County; Township 4 South, Range 13 West, San Bernardino Base and Meridian; CA-LAN-696

APPENDIX F

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MANAGEMENT SUMMARY/ABSTRACT

PURPOSE AND SCOPE: The Rancho Los Cerritos adobe; located in Long Beach, Los Angeles County, California (see Area Map, page 2); required repairs to improve seismic stability. The required work is described in Plans and Specifications Number R-6283 (Long Beach City Engineer 1995). The Job Number assigned by the City of Long Beach is 421411-95.

The adobe consists of three major elements. The long axis of the main structure is oriented roughly along magnetic north and south. From the main structure, two wings extend to the west, one from the northwestern portion of the main structure and the other from the southwestern portion. The courtyard created by the main structure and the two wings is separated from the outside by a gated wall connecting the westernmost walls of the wings.

The current project involves repairs to and stabilization of the western portions of the two wings and the replacement of the connecting wall. The archaeological portion of the project was confined to those areas where soils were to be disturbed. Within the four such areas, a test excavation was completed to determine whether in situ historic or prehistoric deposits existed. Monitoring of the balance of soil removal was accomplished once the test excavations were complete. The excavation and monitoring was followed by laboratory analysis of collected material and preparation of this report.

DATES OF INVESTIGATION: The excavation portion of the project began on 30 April 1996 and was completed on 31 May 1996. Excavation was not continuous during this period, but was accomplished as work areas became accessible. Laboratory work was accomplished during the periods when excavation areas were not available, with the final laboratory work being completed by 21 June 1996. Portions of the report were prepared during the time period indicated above, but the bulk was written between the final laboratory work date and 23 September 1996, with minor corrective work following that date.

MAJOR FINDINGS: Excavations were confined to the Foreman's Room (Room 101) in the south wing, the Milk Room (Rooms 127-130) in the north wing and along the footing area of the courtyard wall. What is referred to as the Milk Room for the balance of this report was in reality the Milk Room in the nineteenth century. After 1930 it became the gardener's and chauffeur's areas. It is presently utilized for staff office space. It was discovered that the Foreman's Room

contained fill to the deepest depth of excavation. The fill contained both historic and prehistoric artifacts and ecofacts, but it was clear they were not in their original location of deposition. The fill, placed as part of a modernization in 1930, protected and preserved sand plaster and whitewash on interior walls. Apparently, this was the original wall treatment. Much more of this material is preserved within the Foreman's Room and probably in other south wing rooms as well.

The Milk Room (Rooms 127-130) excavations also encountered some fill, but mostly natural soils were present. Again, a scattering of historic and prehistoric material was recovered, but it was clear that extensive disturbance extended to the deepest levels of the excavations.

The courtyard wall area was viewed as quite promising for the discovery of in situ prehistoric deposits, since it was known that the wall had been in place since the mid 1840s and that a prehistoric site exists somewhere in the immediate area. Unfortunately, the units at the courtyard wall proved to be nearly sterile. Historic material was found in the upper levels and was probably introduced as a result of wall demolition. Very few prehistoric artifacts were found, and they were scattered.

EVALUATION: The Los Cerritos adobe has been included in the National Register of Historic Places since 15 April 1970 and was designated a National Historic Landmark on 3 August 1970. Dedication ceremonies were held on 2 October 1970. The adobe was designated a Long Beach Historical Landmark (Ordinance No. C-5479) on 27 February 1979 and a State Historic Landmark (No. 978) on 5 August 1988. Dedication ceremonies were held on 30 April 1989. Clearly, Rancho Los Cerritos is an important property (CEQA definition). This study adds new data to the body of knowledge relevant to the property.

PROJECT EFFECT: The project had very minor effect. All areas excavated were in fill, were heavily disturbed and contained relatively few artifacts and ecofacts.

CONSTRAINTS: The project was limited to small, discreet areas of investigation, so it is impossible to fully describe the archaeological deposits associated with Rancho Los Cerritos adobe. No other constraints were encountered.

SUMMARY OF RECOMMENDATIONS: The original interior wall treatment is an important feature of Rancho Los Cerritos, and has been preserved in the western rooms of the south wing. This material is quite fragile. It is suggested that Rancho Los Cerritos staff insure that great care

be taken when excavations in this part of the structure are contemplated. Excavators should be prepared to preserve and document as much of the original wall treatment as possible.

DATA DISPOSITION: The collections, notes, drawings and photographs made during the project are curated at the Rancho Los Cerritos Historic Site, 4600 Virginia Road, Long Beach, California 90807.

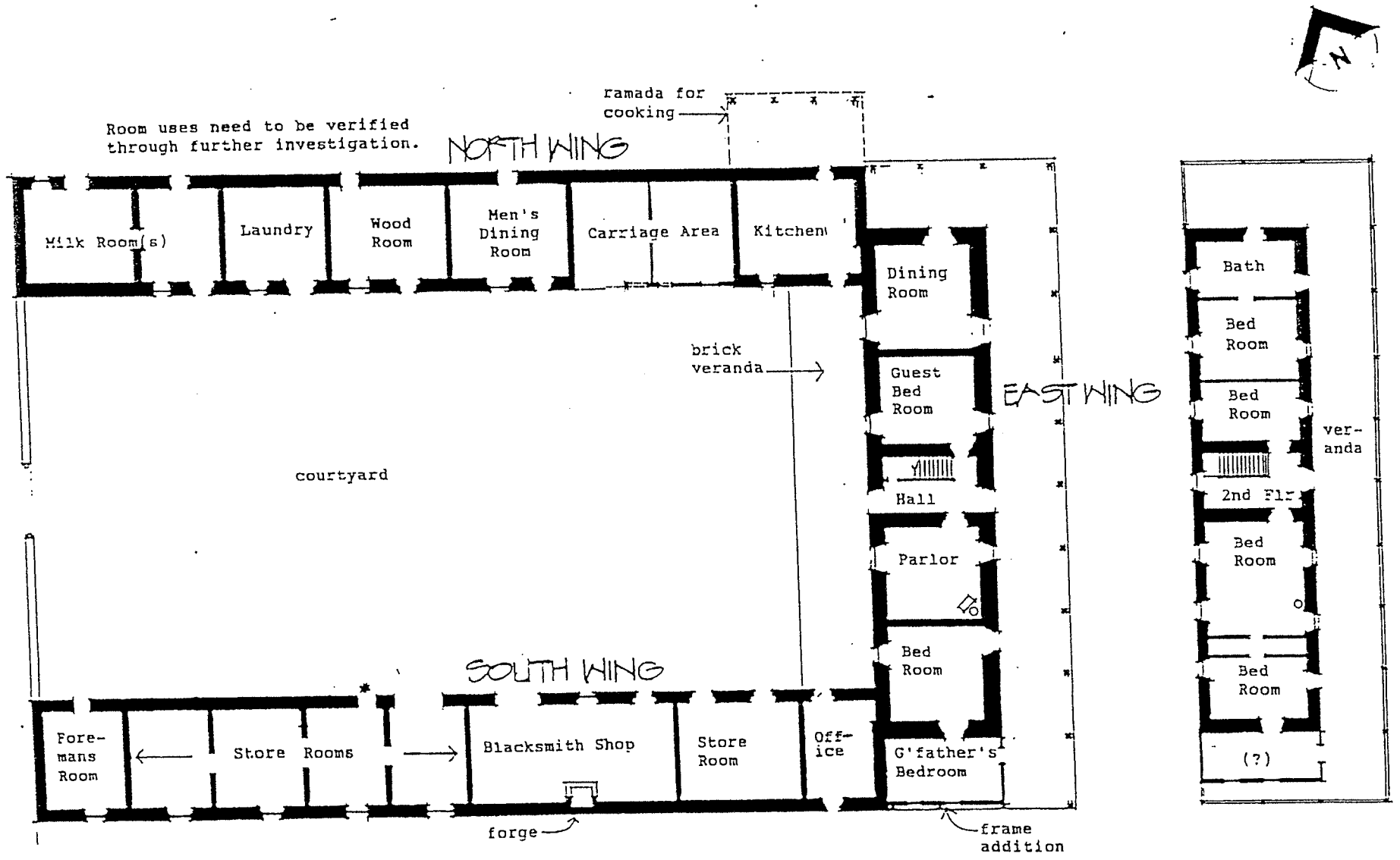
UNDERTAKING INFORMATION/INTRODUCTION

The central structure at Rancho Los Cerritos, Long Beach, Los Angeles County, California is a rectangular adobe building constructed as a residence in the 1840s (Figure 1, below). The main residence is two stories in height with the major axis oriented roughly toward magnetic north. Two single story wings extend westward from the northern and southern ends of the west wall of the main structure. Both wings were used primarily for support functions. A gated wall joins the western wall of the two wings, creating a large courtyard. The building underwent extensive modernization in the early 1930s. The entire structure and the surrounding grounds and buildings are now operated by the City of Long Beach as a museum. Rancho Los Cerritos is California Historical Landmark 978 (Dept. of Parks and Rec. 1990) and has been a National Historic Landmark and in the National Register of Historic Places since 1970. Rancho Los Cerritos is recorded with the California Archaeological Inventory as CA-LAN-696.

Rancho Los Cerritos was constructed of adobe bricks laid without foundation directly on native soils (Greenwood 1987, and confirmed during current study). Erosion and settlement created instability in the western portions of both wings. The City of Long Beach undertook the current project to stabilize the western portions of the two wings. The project included placement of concrete and steel interior footings to anchor the walls, removal and replacement of the courtyard wall, and roof repairs. The project is fully described in Plans and Specifications Number R-6282 for Rancho Los Cerritos Seismic Upgrade in the City of Long Beach, California (Office of the City Engineer 1995). The project was completed under City of Long Beach Job Number 421411-95. The Augustine Company, 8334 Claremont Mesa Boulevard., Suite 102, San Diego, CA 92111 was the primary contractor.

Excavations for the interior footings and those for the replacement courtyard wall were in archaeologically sensitive soils. RMW Paleo Associates served as a subcontractor to the Augustine Company to determine if in situ and important (as defined in CEQA) cultural deposits would be encountered in the footing excavation areas. Excavations for the footings were then monitored by RMW personnel. Other activities included laboratory quantification of collected material, archival research, review of the photograph files maintained at Rancho Los Cerritos, interviews with Rancho Los Cerritos staff and preparation of this report.

FIGURE 1: RANCHO LOS CERRITOS ADOBE PLAN VIEW



* Locations of historic doors and windows need to be verified through further field investigation.

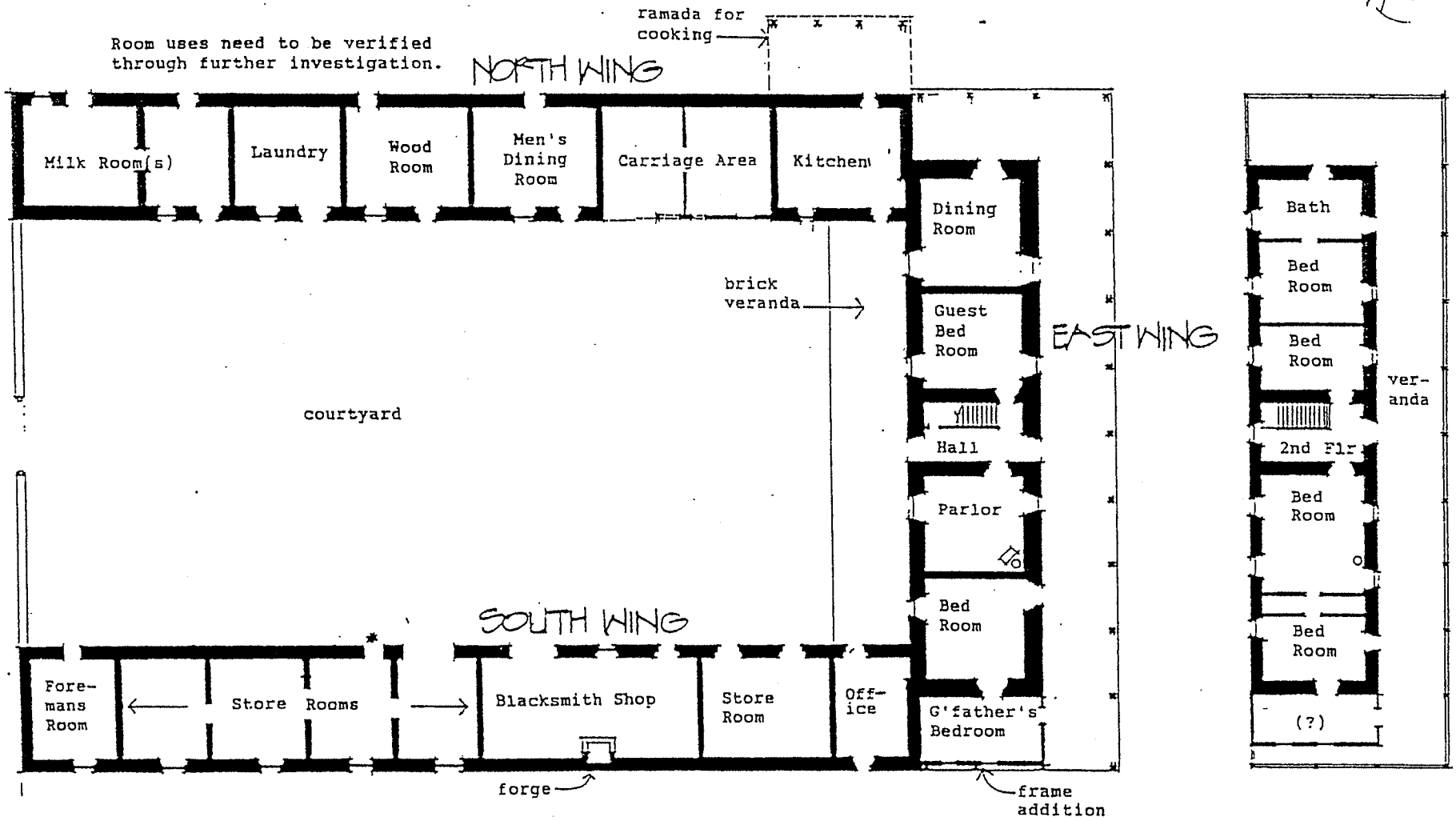
THE JOTHAM BIXBY ERA
1866-1881

Configuration based on:
. Smith's recollections
. Historical photographs
. 1987 field investigation

ADAPTED FROM RANCHO LOS CERRITOS

DOCENT TRAINING MANUAL

FIGURE 1: RANCHO LOS CERRITOS ADOBE PLAN VIEW



* Locations of historic doors and windows need to be verified through further field investigation.

THE JOTHAM BIXBY ERA
1866-1881

Configuration based on:
. Smith's recollections
. Historical photographs
. 1987 field investigation

ADAPTED FROM RANCHO LOS CERRITOS

DOCENT TRAINING MANUAL

The archaeological test excavations and monitoring occurred between 30 April 1996 and 15 July 1996. Those persons participating in the cultural resources portion of the project are listed in the following table. Resumes for all personnel are contained in Appendix A.

Table 1: Personnel and Duty Assignments	
Name	**Principal Duties**
Ronald M. Bissell	Principal Investigator, Field and Laboratory Supervision, Monitoring, Report Preparation
Edward Knell	Excavation, Laboratory Supervision
Blanche A. Schmitz	Excavation, Monitoring, Laboratory Processing
Carol Bissell	Excavation, Laboratory Processing
Anne Retemal	Excavation, Laboratory Processing
Chris Morgan	Excavation, Laboratory Processing
Patrick Maxon	Excavation, Monitoring
Joan Brown	Research, Faunal Analysis
Sue Wade	Pottery Analysis

The maps on the following two pages depict the area around Rancho Los Cerritos as it currently exists.

SETTING

NATURAL: The area surrounding Rancho Los Cerritos is now completely urbanized and all of the major streams are channelized into artificial courses. The situation was quite different during prehistoric and early historic times.

Rancho Los Cerritos sits atop a bluff, the most prominent terrain feature in the immediate vicinity. The Los Angeles River, now in an artificial channel some distance to the west, once ran adjacent to this bluff. The river that approached Rancho Los Cerritos from the northeast was originally the San Gabriel. Flood events in the early 1860s caused the river to change channels and to empty into Alamitos Bay to the east. The same events changed the channel of the Los



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Archaeology
History

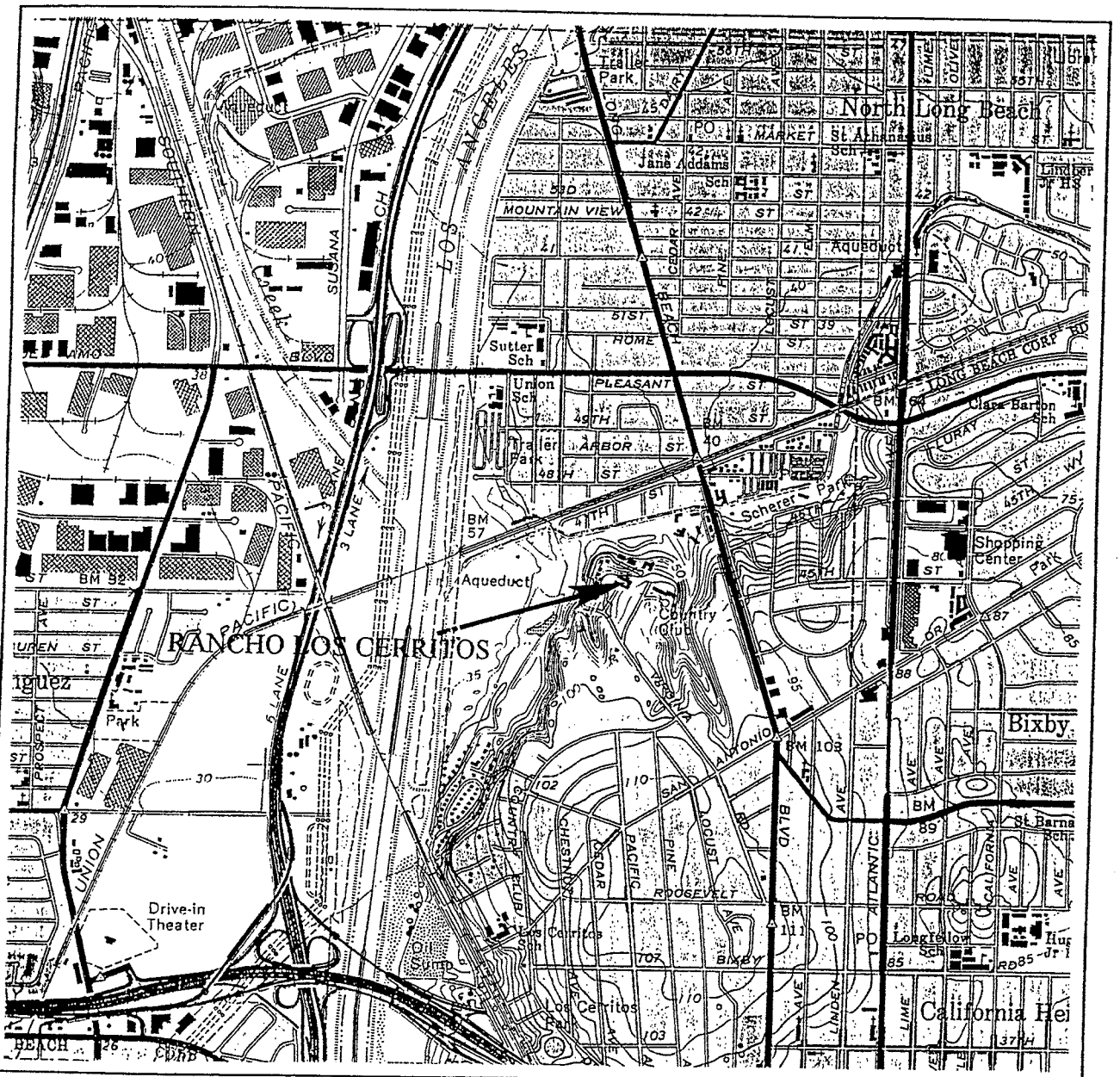
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MAP 1: AREA MAP

Portion of USGS Long Beach, California Sheet, 1957, Revised 1978.

Scale 1:250,000
North is up.



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MAP 2: INDEX MAP

Portion of USGS Long Beach, California 7.5 Minute Quadrangle, 1964, Photorevised 1981.

Scale 1:24,000
North is up.

Angeles River from emptying at Ballona Creek, far to the north, to the current channel. The bluff is the northern expression of a terrain feature that curves to the southeast, with its highest expression at Signal Hill, some seven kilometers distant. The bluff continues to the southeast, terminating near the ocean in the Seal Beach area. The area between the bluff and the Palos Verde Hills, some 12 kilometers to the west, can be thought of as the Los Angeles River delta. Undoubtedly, the river meandered across this area many times in the prehistoric past. A tributary stream draining much of the area behind the bluff joined the river immediately east of Rancho Los Cerritos.

The view from Rancho Los Cerritos cannot be appreciated today, given extensive planting of large, introduced trees in the area. Early pictures of the rancho vicinity indicate a sweeping view in virtually all directions. To summarize, the Rancho Los Cerritos area before development was an imposing position, well watered and near enough to the coast to benefit from the ocean's temperature mitigating effects. For these reasons, among others, the area was chosen for construction of the headquarters of a large ranching operation. The attractiveness of the area was not lost on earlier people. Kroeber (1925) indicates two place names near Rancho Los Cerritos, Tibaha and Ahau. Berner (1975) identifies an Indian Village named Tibahang-na as existing in the immediate area of Rancho Los Cerritos. Numerous prehistoric remains have been found on the Rancho Los Cerritos, including at least one cache of cogstones. Cogstones are artifacts from several thousand years Before the Common Era (B.C.E.), so it is obvious that indigenous people have used the area for a very long period of time.

The climate of the study area vicinity can be described as mild, uniform and semi arid. Temperatures rarely exceed 33 degrees Celsius or drop below five degrees Celsius. Rainfall occurs primarily between November and April, and averages between 25 and 40 centimeters per year. The current climatic conditions did not prevail during the entire span of time that man has been present in the area. Heusser (1978) suggests that pine forests may have occupied the coastal regions from roughly 10,000 to 6,000 B.C.E. The climate then became warmer and drier, resulting in replacement of the pine forests by oak woodland and grassland communities. Coastal sage scrub and chaparral communities became pronounced during the few centuries preceding the Common Era (C.E.).

Study area vegetation today consists almost entirely of introduced species, one result of the extensive urbanization. Numerous ecological communities were present in the Rancho Los Cerritos area during prehistoric and early historic times. These communities provided the entire resource base for the prehistoric population. The early historic people depended more on imported animals and plants, but still made extensive use of the local ecological communities. The following descriptions of the local natural ecological communities is provided in an attempt to create an understanding of area appearance near the end of the prehistoric era. The following descriptions are based on Drover and Koerper (1983).

Saltwater Estuary Community, Beach and Coastal Strand Community and Marine Community: These three communities provided fish, shellfish and marine mammals for the prehistoric and early historic populations. Waterfowl would also have been available. Seaweed may also have been collected and used as food or raw material. Naturally occurring petroleum, asphaltum, occasionally washed ashore and was collected for use as an adhesive. Estuary plants were extensively used for basketry, clothing, shelter and, quite probably, medicines.

Coastal regions were probably used by prehistoric people during the winter months as part of a seasonal round adaptation. Direct exploitation of the three communities by people residing near Rancho Los Cerritos would have been very easy, since the ocean is only about seven kilometers distant along very gentle routes of travel.

Riparian Woodland Community: This community develops along streams and around seeps and springs. Oaks, alders, willows, sycamores and cottonwoods are common trees and growth is usually quite dense. A large variety of herbs, grasses, cattails and berries grow in the riparian woodland community. Animals and birds were attracted by the water and the food resources offered by the vegetation. In short, the riparian woodland offered a great variety of easily exploited resources to the local people.

The riparian woodland community once existed along the Los Angeles River and its major tributaries. No extensive riparian growth can be seen in the area today, but it certainly dominated the stream areas in the Rancho Los Cerritos vicinity. These resources could have been quite easily accessed from the Rancho Los Cerritos area.

The riparian area would have represented a most important, easily accessed resource for the local prehistoric population and was probably also extensively used by early historic people.

Freshwater Marsh Community: Freshwater marshes developed at various times in the Los Angeles River delta area. Freshwater marshes resemble the riparian community in terms of the plants and animals they host, but may be surrounded by a greater extent of forest growth. Migratory fowl are attracted to freshwater marshes and would have been an abundant resource during particular seasons of the year.

Access to any local freshwater marshes would have been quite easy from the Rancho Los Cerritos area.

Grassland Herbland Community: This community would have existed in the broad plains and basin areas to the north and northeast of the study area, and probably in a major portion of the river delta area. The grassland herbland community contained a variety of resources. Seeds of the many annuals would have been the primary resource of interest to the local people, but blossoms, greens, fruits, bulbs, fleshy parts of prickly pear and occasional walnuts were also available, primarily during the spring. Animals included deer, rabbits, rodents, quail and various other birds. Historic people used the community for stock grazing as well as hunting and collecting.

Access to the grassland herbland community required only minor travel from the Rancho Los Cerritos area along gentle routes.

Oak Woodland: The oak woodland occurs in sheltered valleys where the soil is deep. Oak trees can grow to as much as 20 meters in height in such conditions, and are surrounded by grasses, herbs and forbs. Acorns were a primary food resource for the prehistoric inhabitants, at least during the latter part of the archaeological sequence. The acorns become available in the fall, thus providing a rich resource during the time of year when other plants are far past their peak availability. Stands of oaks probably grew in sheltered valleys in the Palos Verde Hills and perhaps along the slopes of the bluff extending southeast of Rancho Los Cerritos. Much larger stands were available in the mountains surrounding the Los Angeles Basin.

Access to the local oaks would have been quite easy, but the mountain oaks would have required a lengthy trek.

Coastal Sage Scrub Community: This community consists primarily of shrubs seldom exceeding a height of two meters. Various species of sage, buckwheat, some flowering plants and grasses form the primary vegetation. Seeds were the primary resource of the sage scrub, but edible stems, stalks, shoots, greens, roots, bulbs and some berries can also be found. Rabbits and rodents abound in the sage scrub. The sage scrub community was the primary native community along the bluff slopes and tops surrounding Rancho Los Cerritos.

Access would have presented no problem. The rancho is located within the community.

Chaparral Community: Chaparral is a dense brush normally found on rocky slopes, usually at slightly higher elevations than the oak woodland community. Manzanita, chamise, mountain mahogany, scrub oak and ceanothus are typical constituents. Seeds, berries, bulbs, shoots and roots are the primary utilitarian resources. The chaparral is a primary deer habitat (Moratto 1984). While some chaparral may have existed in the Palos Verde Hills, dense stands would only have been found in the mountainous areas surrounding the Los Angeles Basin.

Access to the chaparral from the Rancho Los Cerritos area would have required long travel through somewhat difficult terrain.

Cultural:

Ethnography: The study area lies in the prehistoric area of a Native American group known as the Gabrielino (Bean and Smith 1978, Kroeber 1925). The name "Gabrielino" denotes those people who were controlled by the Spanish from Mission San Gabriel. Therefore, the name does not identify a specific ethnic or tribal group. The names the Native Americans living in the study area used to identify themselves have, for the most part, been lost. The Rancho Los Cerritos area lies near the coastal center of the territory traditionally defined as belonging to the Gabrielino. Boundaries with other Native American groups lie considerable distances away. The Juaneño and Luiseño were located to the southeast, the Cahuilla were to the east, the Serrano to the northeast, the Tataviam to the north and the Chumash to the Northwest. The Gabrielino shared a common language heritage with all these groups, excepting only the Chumash. The Gabrielino controlled the Pacific Ocean beach from about Topanga Canyon on the north to Aliso Creek on the south. The southern Channel Islands were also under Gabrielino control and were reached by using ocean going plank canoes, part of a well developed maritime adaptation.

The Gabrielino language, as well as those of all of the surrounding groups mentioned above, excepting only the Chumash, was derived from the Takic family, part of the Uto-Aztecan linguistic stock. By contrast, the Chumash language, from the area north of the Gabrielino, is derived from Hokan stock of the Yuman language family, representing an origin quite different from that of the Gabrielino. The Chumash share this trait with groups located south of the Luiseño.

The Yuman family of languages is derived from the American southwest while the Takic family can be traced to the Great Basin area (Driver 1969). Linguistic analysis has established that the Hokan speakers of Ventura and San Diego Counties were separated some time after 500 B.C.E. The implication is that the entire southern California coastal region was once filled with Hokan speakers who were gradually separated and displaced by Takic speaking migrants from the Great Basin area.

The Gabrielino may have numbered as many as 5,000 people at their peak in the precontact period. However, population estimates are very difficult to make because many of the Indians did not come under Spanish control. Mission records are therefore most incomplete.

The center of the Gabrielino religion was Chinigchinich, the last of a series of heroic mythological figures. The Chinigchinich religion was apparently relatively new when the Spanish arrived, and was spreading to nearby groups. Relatively little is known concerning religious practices, but an enclosure containing a representation of Chinigchinich was found in each of the larger villages. The worship of Chinigchinich was closely tied to the toloache cult where rituals included the ingestion of extracts from the datura plant, a hallucinogen.

Girls were the subject of an initiation ceremony around the age of puberty. It is unknown whether boys had a similar ceremony. Marriages were the occasion for elaborate ceremonies, but little is known concerning actual practices.

The Gabrielino traced their descent through the male line, with status being determined by both wealth and heredity. Each lineage had a leader (chief), whose authority rested in possession of a "sacred bundle." The chief had several assistants to help him with his many duties, including the collection of taxes (gifts from the people, primarily for consumption by guests), leading war parties, concluding treaties and seeing to community welfare. Subject to approval of the people,

the position of chief was hereditary within the male line, though females could serve if no male heir was available. Shamans were also people of power, whose primary responsibilities were the overseeing of the various rituals.

The mainland Gabrielino practiced cremation of the dead, cremation usually occurring about three days after death. Most possessions of the deceased were also burned, though some were kept to be burned at the annual mourning ceremony, an eight day event in the fall of the year.

Prehistoric Era: The archaeological heritage of California is quite rich, perhaps more so than any other North American region north of Mexico. However, the archaeology of California is not very well known. The California Native Americans were generally quite peaceful and did not often offer warlike resistance to European settlement. Consequently, they did not gain any great notoriety during the settlement period. Also, the original Californians, especially those within the coastal regions, were first under the control of the Spanish and Mexican governments and only later, after most of their culture had been destroyed by disease and displacement, did they come under the control of the United States. There was only a minor Native American presence remaining in California when it became a United States possession and massive development began. Consequently, very little interest in the natives and their prehistory was generated. It was many years later before the size, complexity and extent of archaeological deposits in the state became apparent.

Two major works attempting to describe California archaeology have appeared in recent years. These are the works of Chartkoff and Chartkoff (1984) and Moratto (1984). The following discussion is based on these two references, as well as others cited.

A long standing tenet of New World archaeology has been that man did not arrive in the western hemisphere until about 10,000 to 11,000 years B.C.E. Some researchers have argued for earlier dates of entry, but the evidence is not conclusive and has not been accepted by most archaeologists. Until recently, it was claimed that early sites lacked definitive dates. The situation is now beginning to change as a result of studies in other disciplines as well as recent archaeological studies. Mitochondrial DNA studies of contemporary Native American populations completed at Emory University and elsewhere suggest New World entry between

21,000 and 42,000 years ago (Metzler 1993). An example of an archaeological site with older dates is the Monte Verde site in Chile, confidently dated to 12,250 years ago. Coupled with the span of time required for dispersal from the Bering Strait area to southern Chile, it is obvious that New World arrival had to occur long before the generally accepted dates. The Meadowcroft Rockshelter in Pennsylvania has also been dated to about the same period as the Monte Verde site (Dixon 1993).

Most of the very few remains from the earliest period usually indicate a very small, mobile population, apparently dependent on hunting of large game animals as the primary subsistence strategy. Other resources were certainly used, but the bulk of the few traces remaining today are related to game hunting. Sites like Monte Verde and Meadowcroft Rockshelter are beginning to change this view. A rather sedentary population exploiting a wider range of resources is indicated at both sites.

The Chartkoffs identify the earliest portion of the archaeological sequence, to about 9,000 B.C.E., as the Paleo-Indian Period. No Paleo-Indian Period sites are known in the vicinity of the study area. This may be due to destruction of the sites by later human activity, or perhaps the Paleo-Indians simply did not utilize the local region.

With few exceptions, lithic artifacts are the only surviving material from the Paleo-Indian Period. These consist primarily of large and extremely well made projectile points and large but cruder tools such as scrapers and choppers. Encampments were sited near a major kill. Occupation would have lasted only until the resources of that kill were exhausted. Such an economy, using only a small fraction of the available resources, would not have supported a large population. It is probable that the Paleo-Indians lived in groups no larger than extended families and that contact with other such groups was infrequent. As mentioned earlier, recent work is beginning to indicate that at least portions of the Paleo-Indian population exploited a larger resource base and were more sedentary.

The earliest extensive human remains in the study area vicinity are today identified as the San Dieguito culture. The Chartkoffs refer to the appearance of the San Dieguito as the beginning of the Archaic Period. The San Dieguito type site is CA-SDI-149, located far to the southeast of the current study area in the floodplain of the San Dieguito River. The San Dieguito

component of CA-SDI-149 is in excess of two meters below the surface. Radiocarbon dates from the San Dieguito levels of CA-SDI-149 indicate occupation around 7,000 to 6,500 B.C.E. Artifacts from the San Dieguito component included two forms of leaf shaped knives, foliate to ovoid bifaces that may be knife blanks, foliate and short bladed shouldered points, a crescent, engraving tools, choppers, core hammers, pebble hammerstones, cores and a variety of scraper types. The collection argues that hunting was a major subsistence activity. Many of the tools can be interpreted as those necessary for the exploitation of wood and fibers for use as clothing, shelter and similar utilitarian objects.

SDM-W-49, located near the Batiquitos Lagoon in San Diego County, far southeast of the current study area, also contained a San Dieguito component. The San Dieguito component at SDM-W-49 was encountered at depths of 50 to 140 centimeters and was dated to about 6,300 to 6,000 B.C.E. The tools recovered are similar in most respects to those from CA-SDI-149. However, the people at SDM-W-49 also relied heavily on marine resources, especially shellfish. Large pecten was apparently the preferred shellfish during San Dieguito times.

In summary, the San Dieguito people gained their subsistence primarily from the plants and animals associated with the chaparral ecological community and from coastal marine resources. They did not, however, take advantage of the hard seeds associated with the chaparral. Hunting played a major subsistence role, but the target animals were smaller and more plentiful in a given area in comparison to the earlier, larger animals associated with the Pleistocene. The distinctive artifacts from the San Dieguito are large, rather crude projectile points, scrapers and choppers; crescent shaped objects of uncertain utility and other tools such as gravers. Bone awls appear near the end of the Early Archaic, perhaps indicating that basketry was then being produced.

By the Middle Archaic, 6,000 to about 4,000 B.C.E., the Native Americans had learned to take advantage of the hard seed resources of the coastal sage scrub and chaparral ecological communities. The tools used for processing the hard seeds, manos and metates, appear in large numbers for the first time. They are the hallmarks of the Encinitas Tradition. Large shell mounds in the coastal regions are frequently traced to the Encinitas. The Encinitas persisted in essentially unchanged form until the close of the Late Archaic, around 2,000 B.C.E. Local minor differences

in traits are apparent during the Encinitas, and these have led to the identification of several sub groups within the Encinitas. In Los Angeles County, in the area which would later be identified as Gabrielino territory, the sub group is known as the Milling Stone Horizon. The Milling Stone people produced the cogstones recovered during the 1930s at Rancho Los Cerritos.

The minor differences between the Milling Stone and surrounding cultures were probably the result of increasing isolation. The total population was larger, as were the groups in which people lived. However, the strategy of utilizing hard seeds and ocean resources meant that a given group could follow the same general route from year to year as resources in different areas ripened and became available. This led to increased isolation from nearby groups and eventually to noticeable differences in artifact typology. It is worthwhile to note that the Encinitas people were the first to colonize the Channel Islands in large numbers.

A long standing tenet of local archaeological thought is that people of the Milling Stone period practiced a seasonal round of resource exploitation. In this view, the people would winter along the coast utilizing primarily marine resources. In the spring, a move would be made to inland camps to take advantage of the ripening vegetable resources. Perhaps several moves would be made as the year progressed, until autumn camps in the foothill or mountain areas were occupied. The people would return to the coast with the onset of a new winter season. There are few actual points of evidence to support this theory, since there are few available indicators of seasonality. It is very difficult to establish that a given encampment was used only during a particular season. Recently, several large, complex sites of Milling Stone age have been discovered in the first range of foothills separating the basin area from the surrounding mountains. These site areas all lie roughly half the distance between the coast and the highest elevations of the surrounding hills. It is quite possible that these camps were occupied on a year round basis, with exploitation of the resources being accomplished by small parties spending a few days away from the main camp.

The vast bulk of Milling Stone age artifacts are tools related to the procurement and processing of food resources. Decorative items and, with a few notable exceptions, objects of ritual are rare. Milling Stone people are accordingly often seen as rather primitive, with most activities directed toward mere survival. This view is also beginning to change as a result of

recent discoveries. For example, a recently described Milling Stone age site near Lake Forest in southern Orange County was apparently a ceremonial area that required large expenditures of time and resources to construct and maintain (Bissell 1994). Such sites establish that Milling Stone people could accumulate the resource reserves to allow a great deal of time and effort to be spent on activities not related to survival, and that they had well developed religious beliefs. In other words, Milling Stone people were far more advanced than is generally thought.

The Pacific Period began around 2,000 B.C.E. and persisted until Spanish contact. During the Early Pacific, persisting until about C.E. 500, the local Tradition is known as the Campbell. The major difference between the Campbell and earlier Traditions was the introduction of the mortar and pestle, a tool technology allowing the exploitation of the acorn as a food resource. Evidence of trade is pronounced during the Campbell. Steatite from the Channel Islands and obsidian from areas far inland are found in most sites.

The Late Prehistoric (or Shoshonean) Tradition began in the years around C.E. 500 and lasted until Spanish contact. The Late Prehistoric is marked by large populations, with some coastal camps containing as many as 1,500 persons. Apparently, many of these settlements were permanent, in the sense that they were occupied throughout the year rather than seasonally. Art flourished during this time and many striking objects of stone, bone, wood and shell were manufactured.

It will be recalled that during Late Prehistoric time migrants from the Great Basin appeared in the Los Angeles and Orange County area. Apparently, these people were very quick to adopt most of the local traits, for it is difficult to separate the migrant deposits from those of the indigenous people on the basis of artifact typology alone.

The Moratto and Chartkoff chronologies are not the only ones in use and, in fact, are somewhat generalized since the work addresses the entire state of California. The latest chronology to appear which has gained local acceptance is that of Koerper and Drover (1983). The Koerper and Drover chronology is based on extensive work at CA-ORA-119-A, a large multi-component site near the University of California, Irvine campus. CA-ORA-119-A contained evidence from very early times to the historic period. A summary of the Koerper and Drover chronology is given in Table 2 on the following pages.

Table 2: CHRONOLOGY, BASED ON KOERPER AND DROVER (1983)		
PERIOD	**TEMPORAL SPAN**	**MAJOR DIAGNOSTIC TRAITS**
Early Man or Paleo-Indian	? to 7500 B.C.E.+/- ?	Lack of grinding implements.
		Large, well made projectile points.
Characteristics and adaptations:	*Subsistence through hunting of large Pleistocene game animals.*	
	Temporary camps at large kills.	
	Group no larger than extended family.	
	Widespread. Covered most of North American continent, but no sites known locally.	
	Very small total population.	
Milling Stone or Encinitas	7500 B.C.E. +/-? to 1000 B.C.E. +/- 250	Predominance of manos and metates.
		Ornaments made of stone.
		Large and often crude projectile points.
		Cogstones and discoidals.
		Charmstones.
		Some mortars and pestles near end of period.
Characteristics and adaptations:	*Heavy reliance on hunting in early part of period. Deer, rabbits and other small game associated with chaparral.*	
	In middle to late part of period reliance was on hard seeds associated with chaparral.	
	Coastal groups utilized shellfish and near shore resources.	
	Seasonal round based on ripening vegetable resources rather than animal migrations. Caused increased isolation leading to noticeable differences in culture in much smaller geographic areas.	
	Probably about 50 persons in average group.	
	Very little noticeable change in last two thirds of period.	
	Colonization of Channel Islands near end of period.	

Table 2 Continued: CHRONOLOGY, BASED ON KOERPER AND DROVER (1983)		
PERIOD*	**TEMPORAL SPAN**	**MAJOR DIAGNOSTIC TRAITS**
Intermediate or Campbell	1000 B.C.E. +/- 250 to C.E. 750+/- 250	Bone ornaments.
		Wide use of mortars and pestles along with manos and metates.
		Use of steatite begins.
		Many discoidals.
		Large projectile points trending to smaller in the last part of the period.
Characteristics and adaptations:	*Heavy reliance on acorns as food resource. Hard seeds, small animals and coastal resources continue to be used.*	
	Many more deep water ocean resources utilized.	
	First permanently occupied villages.	
	Large increases in local population.	
	Atlatl (spear thrower) in use. Bow and arrow probably introduced near end of period.	
	Some evidence of trade.	
Late Prehistoric or Shoshonean	C.E. 750 +/- 250 to Spanish contact	Shell ornaments.
		Mortar, pestle, mano and metate use continues.
		Small, finely worked projectile points.
		Wide use of steatite.
		Some pottery vessels appear near the end of the period.
Characteristics and adaptations:	*Increased exploitation of all resources.*	
	Large populations, some villages had as many as 1,500 persons.	
	Great increase in art objects.	
	Much evidence of trade.	
*Both the Chartkoff and Koerper and Drover names are given for the various periods, with the Koerper and Drover names appearing first.		

Historic Era: The first known Europeans to see what would become Los Angeles were members of the 1542 expedition of Juan Rodriguez Cabrillo. Cabrillo sailed along the coast and did not explore inland. Europeans did not return to the Los Angeles area until 1769 when Gaspar de Portola led an overland expedition from San Diego to Monterey. This expedition of 63 persons passed through the local area far to the northeast of Rancho Los Cerritos during late July 1769.

Mission San Gabriel Arcangel was established in 1771 and Mission San Juan Capistrano became active in 1776. The missions were charged with administering to the Indians in the local area. Mission life did give the Indians some skills needed to survive in their rapidly changing world, but native populations were decimated by diseases for which they had no immunity. After 1810, mission population declined faster than it could be replenished. The Mexican Revolution, beginning in 1821, overthrew Spanish control and the new Mexican government had a very different outlook on mission activities, in comparison to the earlier Spanish administration. Secularization of the missions, planned under the Spanish, was greatly accelerated by the Mexican government. Plans to provide land, training and living quarters for the Indians never developed and the mission lands were soon in the hands of a relatively few influential Mexican families. At best, the Indians could work as hands on these large ranchos. The decline continued until few Gabrielino remained.

In November 1784, the Spanish Governor of Mexico, Pedro Fages, granted use of a large tract of land to Manuel Nieto. A second portion, that included the land on which the Rancho Los Cerritos would be built, was received in 1790. This grant brought Nieto's holdings to approximately 300,000 acres. The land was loosely described as between the San Gabriel and Santa Ana Rivers, and extending from the southern boundary of Mission San Gabriel to the ocean. In 1795-96, Nieto's lands were reduced to approximately 167,000 acres, because they encroached on Mission San Gabriel lands. Though often described as land grants, McPherson (1988) argues that policies of the period actually gave rights to occupy and use the land, but stopped short of granting ownership. The right to use the land was a reward for Nieto's long period of military service.

Nieto died in 1804 and the property was shared by his heirs. The portion of the property containing Rancho Los Cerritos was given to Manuela Nieto de Cota, Nieto's only surviving

daughter. A formal partition was not permitted until 1834, when Manuela received title to her portion of the property. Manuela's husband, Guillermo Cota, stated in petitions his intentions to improve the property. Cota had a distinguished career, serving as a Commissioner of the Pueblo de Los Angeles from 1810 to 1817 and again from 1822 to 1825. He also served as Mayor in 1827 and 1829.

The Cotas constructed two adobe houses in the vicinity of the current Rancho Los Cerritos buildings, but very little is known about them. Decades later, one of the houses, then abandoned, was referred to as the Flea House. Berner (1975) describes the Flea House as located at, "...the site of the eleventh fairway on the grounds of the Virginia Country Club." Nevertheless, a map in the same reference depicts the Flea House as located a short distance to the northwest of the extant structure, in an area currently covered by residential construction. Sanchez and Allen (1987) confirm that the structure was probably to the west. In any event, no trace of either of these earlier structures remains.

Jonathan Temple, a native of Reading, Massachusetts, arrived in southern California in 1826. Temple became a Mexican citizen and joined the Catholic church, taking the name Juan Bautista. He operated a merchandising establishment in Los Angeles, and in 1830 married Rafaela Cota, a second cousin of Guillermo Cota. In December 1843, Temple purchased the Rancho Los Cerritos for $3,025.00.

Temple was an excellent businessman and was involved in many civic undertakings. He operated one of the first stores in Los Angeles, was instrumental in starting the first library, and constructed the first courthouse. He held several civic positions, including that of Alcalde during the Mexican-American War crisis. He rapidly developed Rancho Los Cerritos. By 1852 the ranch had 15,000 cattle, 3,000 horses and 7,000 sheep, with as many as 3,500 calves being branded each year. By this time, Temple was the wealthiest man in the Los Angeles area with assessments totaling $108,000.00 (Berner 1975).

Temple began construction of the existing Rancho Los Cerritos adobe in 1844. The house and two wings were constructed at this time. The wings were both extended to the west a few years later, perhaps as early as 1847 or 1848. The extension of the two wings is detectable today in the form of architectural details concerning wall ties and construction methods. As originally

constructed, the house was approximately 100 feet in length and the wings extended 70 feet to the west. The extension of the wings added approximately 90 feet to each.

Temple petitioned the United States Land Commission following the Mexican-American War, and his ownership of Rancho Los Cerritos was confirmed in 1853. The following year the Land Commission reversed itself and it was not until 1856 that Temple received clear title to the land. In 1866, with the cattle industry in decline and desiring to join his daughter in Paris, France, Temple sold Rancho Los Cerritos to Flint, Bixby & Company for $20,000.00.

Cousins Thomas and Benjamen Flint and Lewellyn Bixby, had developed a successful sheep ranching operation in central California beginning in 1854. Jotham Bixby, one of Lewellyn's younger brothers, was asked to manage Rancho Los Cerritos and promptly settled with his family in the adobe. A successful sheep ranching operation was developed, with as many as 30,000 head grazing on the rancho. The installation of numerous wells and windmills alleviated the problems caused by the periodic droughts. The economy was changing rapidly during Jotham Bixby's tenure at Rancho Los Cerritos. Beginning in the late 1870s, sheep ranching became less important and much of the rancho was leased for dairy and farming operations. Many parcels of the land were sold, but some 3,500 acres remained when Bixby died in 1917. The Bixby family did not retain residence at Rancho Los Cerritos during this entire period, moving to Los Angeles in 1881 and subsequently to the new town of Long Beach in 1885. The adobe then was occupied by renters until it and the surrounding five acres were purchased in 1930 by Llewellyn Bixby, Sr., son of one of the original founders of Flint, Bixby & Company.

Llewellyn Bixby, Sr. modernized the adobe. Various internal changes were made to create more useful living space, the current tile roof was added, as was the current sunporch and courtyard improvements. Electricity, plumbing, eleven furnaces, telephone service, an intercom system and four fireplaces were added. At least one cache of cogstones (Milling Stone age artifacts) were found during excavations for the floor furnaces. Concrete slabs were laid in the rooms, with wooden floors installed over them in all areas. Llewellyn Bixby, Sr. died in 1942, but his family continued to live at Rancho Los Cerritos, on and off, until 1954. Through both family and community efforts to preserve Rancho Los Cerritos, the City of Long Beach acquired the site in 1955 for use as a public museum, library and park.

Of particular importance to this study is the manner in which the original roof was constructed. Berner (1975), paraphrasing from Smith (1931:62-63) offers the following description:

> The original roof was the typical "California" roof. A first layer of planks were (sic) covered with a second layer of sand and gravel. Over all this was spread hot brea (asphaltum) from the open beds west of early day Los Angeles, known then as now as the La Brea Tar Pits. Under the hot summer sun, the brea would soften and expand, sometimes running down the sides of the building. In the winter it would shrink during the cold weather, and the rains brought many leaks. Jotham Bixby, the next resident, soon had a Yankee-style roof put on, and the present tile roof was put on when the house was restored in 1930.

The construction of the building foundation is also of interest to this study. Berner (1975), once again paraphrasing from Smith (1931:62), states, "The foundation was fired brick from the east coast, and these bricks were also used in paving the veranda or porch at the back of the house, which faced the family garden." Notwithstanding, archaeological excavations by Greenwood (1987) and the current study established that the building has no foundation other than adobe bricks placed directly on native soil.

Also of interest to this study is the fact that the concrete floor in the Foreman's Room (Room 101) was removed to repair a plumbing leak. The concrete floor was not replaced in order to create an appearance more like that of the nineteenth century.

The information contained in the above narrative, except where otherwise cited, was provided by staff members Ellen Calomiris and Steve Iverson of the Rancho Los Cerritos, the Rancho Los Cerritos Docent Training Manual and the Historic Structure Report by Gilbert Arnold Sanchez. Both the manual and the report are on file at the Rancho Los Cerritos.

RESEARCH DESIGN

Theoretical Basis: The scope of the current investigation was limited to those areas that would be disturbed by the seismic upgrade. These areas were along the west interior walls of the western rooms of both wings (Rooms 101 & 130), on the interior of room 127, adjacent to the Visitor Center (1930 garage area), and the footing area of the courtyard wall. Excavations were completed in these four discreet areas as a means of determining if they contained in situ deposits

important to our understanding of area prehistory and history. The investigation consisted of obtaining a controlled sample from each of the four areas listed, evaluation of the sample and monitoring of the further excavation completed for footings.

Previous Research: Apparently, archaeological investigations have been active in the Rancho Los Cerritos area since 1878, when Schumacher completed work in the vicinity. No comprehensive report of this work can be found.

Four discoidals and seven cogstones were recovered from excavations in 1930 for installation of furnaces and plumbing. Unfortunately, the exact location of recovery is not known, but it was within the confines of the building and courtyard.

Beginning in the 1950s, Evans completed numerous excavations on the Rancho Los Cerritos property, but comprehensive reports of this work have not appeared, and the collections are not available for review (Greenwood 1987, Calomiris 1996). Apparently, the most intensively studied area Evans excavated is located about 20 meters west southwest of the adobe building. Evans interpreted the area as an adobe borrow pit subsequently filled with trash. The deposit is described as stratified. The area today lies mostly in a landscaped area between a driveway and a parking lot. It is known that the deposit extends some distance into the parking lot, since excavations for installation of a water line yielded cultural material.

Greenwood (1987) completed three excavation units at Rancho Los Cerritos. These excavations were designed to gain knowledge of the wall and foundation architecture of the adobe structure. One of Greenwood's units was placed in the northeast corner of the Foreman's Room (Room 101). Excavations completed for the current project were also in this room, but along the western wall. Greenwood's other units were placed in the north wing, east of where excavations for the current project were made, and in the main house. Greenwood's major observations relative to this study are:

1. No foundation exists at Rancho Los Cerritos. The lower courses of adobe brick were laid directly on native soils, apparently with little or no preparation.
2. A scattering of historic and prehistoric material was encountered in all units. Much of the floor material (below the modern floors) was fill, imported from

somewhere in the immediate vicinity.

Greenwood's project was very limited in scope, and was designed to answer very limited and specific questions. A formal research design was not developed, but three research questions were formulated:

1. Can original architectural features be revealed archaeologically?
2. Can artifact or feature patterns reveal functional divisions of the interior space?
3. Does the demonstrated or potential significance of the resources confirm the eligibility of the structure to the National Register of Historic Places?

Current Study: The current project was also strictly limited in scope. Where Greenwood was limited to three discreet excavation areas, the current project was permitted four. No disturbance other than the excavation units themselves took place during the Greenwood study, but the excavation units of the current study were expanded to provide for footing construction. The project was designed to determine if important in situ archaeological deposits existed in any of the areas where footings were to be constructed. If important deposits were discovered, they were to be subjected to a data recovery excavation before excavation for the footings could occur. No data recovery excavations were undertaken, since no important in situ deposits were encountered.

The three room interiors that were excavated during the current project were known to be disturbed. The floors had been leveled by the original occupants and it was known that concrete floors had been added during the 1930 modernization. The excavations under the courtyard wall were a different matter, since the southern portion of the west wall had been in place since the mid 1840s, thus preserving the underlying material. It is known that a prehistoric site is in the vicinity, and the area under the wall was seen as the best opportunity to establish whether undisturbed prehistoric deposits are present in the area.

The Greenwood research questions were valid for the current study, thus they were included in the list of hypotheses. Additional hypotheses were formulated to more fully guide the current study.

Hypotheses:

1. Original architectural features will be revealed during the excavations.
2. Artifact or feature patterns will reveal functional divisions of the interior space.

3. In situ historic deposits will be encountered in the rooms where excavations are to be made. Such deposits will be important.
4. In situ prehistoric deposits will be encountered in the rooms where excavations are to be made. Such deposits will be important.
5. In situ historic deposits will not be encountered in the excavations under the courtyard wall.
6. In situ prehistoric deposits will be encountered in the excavations under the courtyard wall. Such deposits will be important.
7. The study will confirm the worthiness of the structure for listing as a National Register of Historic Places property.

METHODOLOGY

Excavations for the Rancho Los Cerritos project were confined to four discreet areas, three of which were within rooms at the west end of the adobe wings. The fourth area was at the footing of the replacement courtyard wall. Excavations were first completed in the west room of the southern wing, also known as the Foreman's Room (Room 101). As was noted earlier, the concrete floor had been removed in this room, so excavation could begin immediately. Demolition had to be completed before excavation could begin in the other three areas. The project specifications limited excavations to one cubic yard of material from each of the four areas.

To make the most of the limited excavation allowed in the Foreman's Room (Room 101), four units measuring 50 centimeters on a side were laid out parallel to the west wall and about 30 centimeters from it. Three of these units were then excavated. In the upper part of the units, material was removed by stratigraphy. While the number varied from unit to unit, about six stratigraphic levels could be detected in the first 30 centimeters of excavation. At the time, these were interpreted as living floors, but later evidence established otherwise (see discussion section). Below 30 centimeters excavation was continued in arbitrary levels of 10 centimeters each.

Excavated material was placed in buckets and carried to a screening area outside the building. The screening area was placed on a portion of the asphalt covered parking area in order

to prevent damage to archaeologically sensitive soils. Screening was accomplished by passing the material through 1/8 metal hardware mesh. All artifacts, ecofacts and appropriate samples of soils and "floors" from each level were bagged and labeled with identifying information. A level report form was completed by the excavator for each stratigraphic and arbitrary level of each unit. Wall profile drawings were prepared of each unit. Photographs were made of appropriate details of each units.

The fourth unit excavated in the Foreman's Room (Room 101) was relocated to be placed immediately adjacent to one of the other units. This was done to allow deeper excavation than was possible in a 50 by 50 centimeter unit.

Units one meter by 50 centimeters were excavated in the other three excavation areas. No definite stratigraphy could be detected in the courtyard wall area, so excavation proceeded in arbitrary levels of 10 centimeters. Some stratigraphy was evident in the Milk Room (Rooms127-130) excavations, but was not as clear as in the Foreman's Room (Room 101). Excavations in the Milk Room (Rooms127-130) followed the stratigraphy in the upper levels, but lower levels were excavated in arbitrary 10 centimeter increments. In all other respects, the methodology matched that used for the Foreman's Room work.

Once the controlled excavations were complete, mass hand and machine excavation was used by the construction crews to remove the balance of the soil from the footing areas. All of the excavation activity was monitored by an archaeologist. In all cases the removed soil remained in the project vicinity and could be examined in detail. All cultural material, with the exception of obviously modern debris, was collected, bagged and identified for provenience.

All collected material was removed to the RMW Paleo Associates laboratory for cleaning and processing. All material was lightly washed, dried, sorted by type and provenience and was described. All data was entered into catalog worksheets, which formed the basis for a computer data base. The resulting catalog of material collected is contained in Appendix B.

FINDINGS

Introduction: The locations of all excavation units and the areas monitored during demolition are depicted in the plans on the following two pages. The drawing on the third following page is

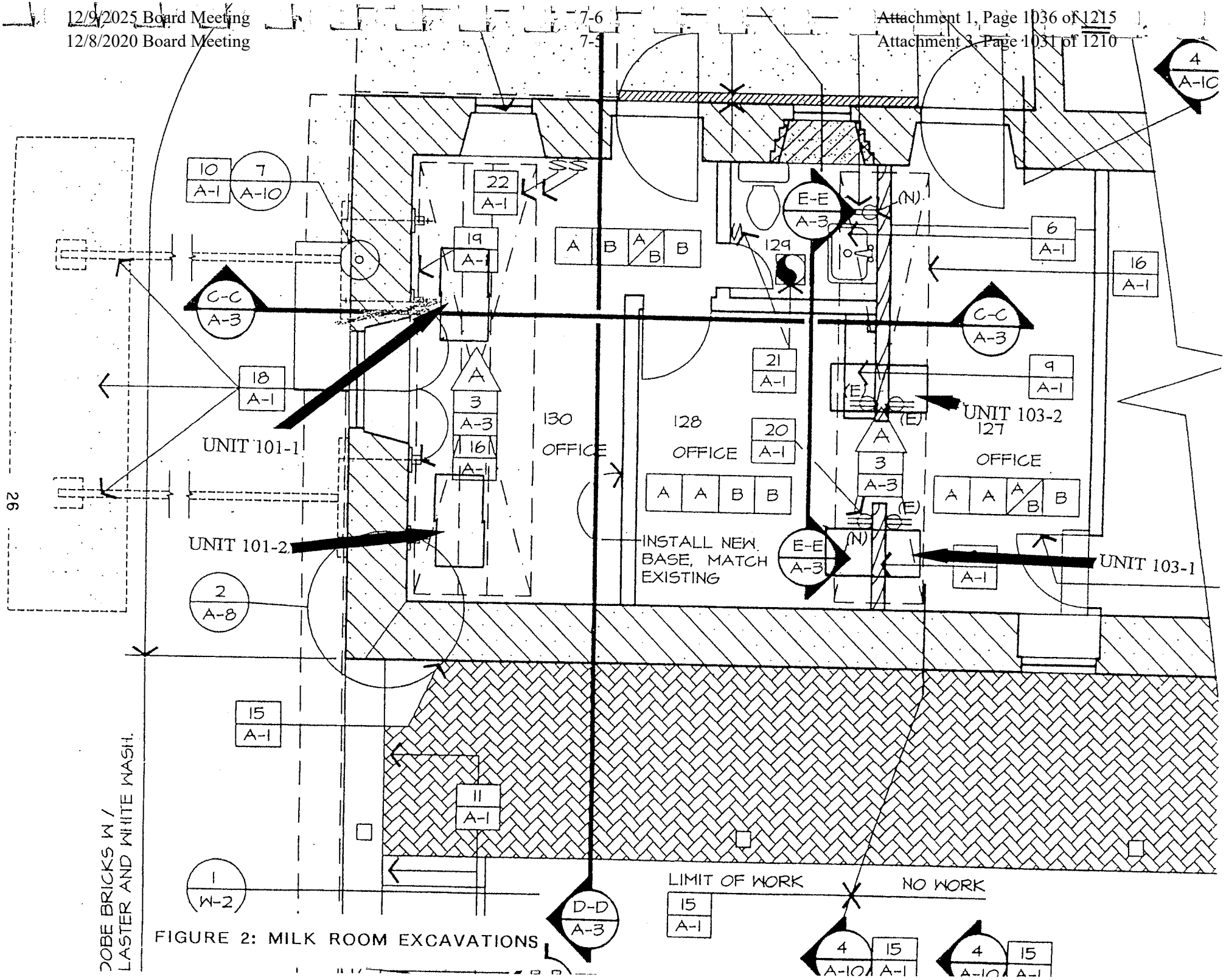


FIGURE 2: MILK ROOM EXCAVATIONS

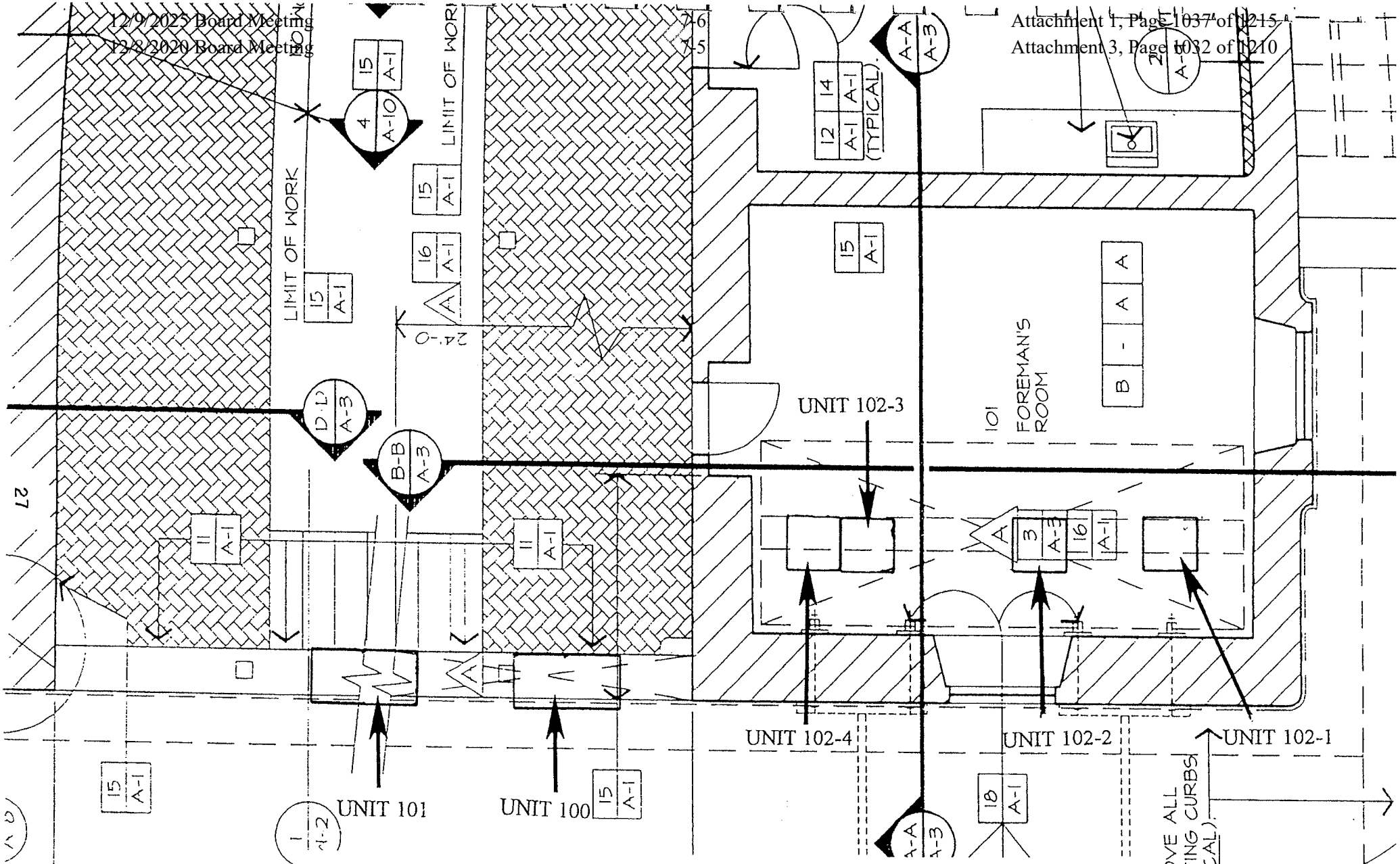
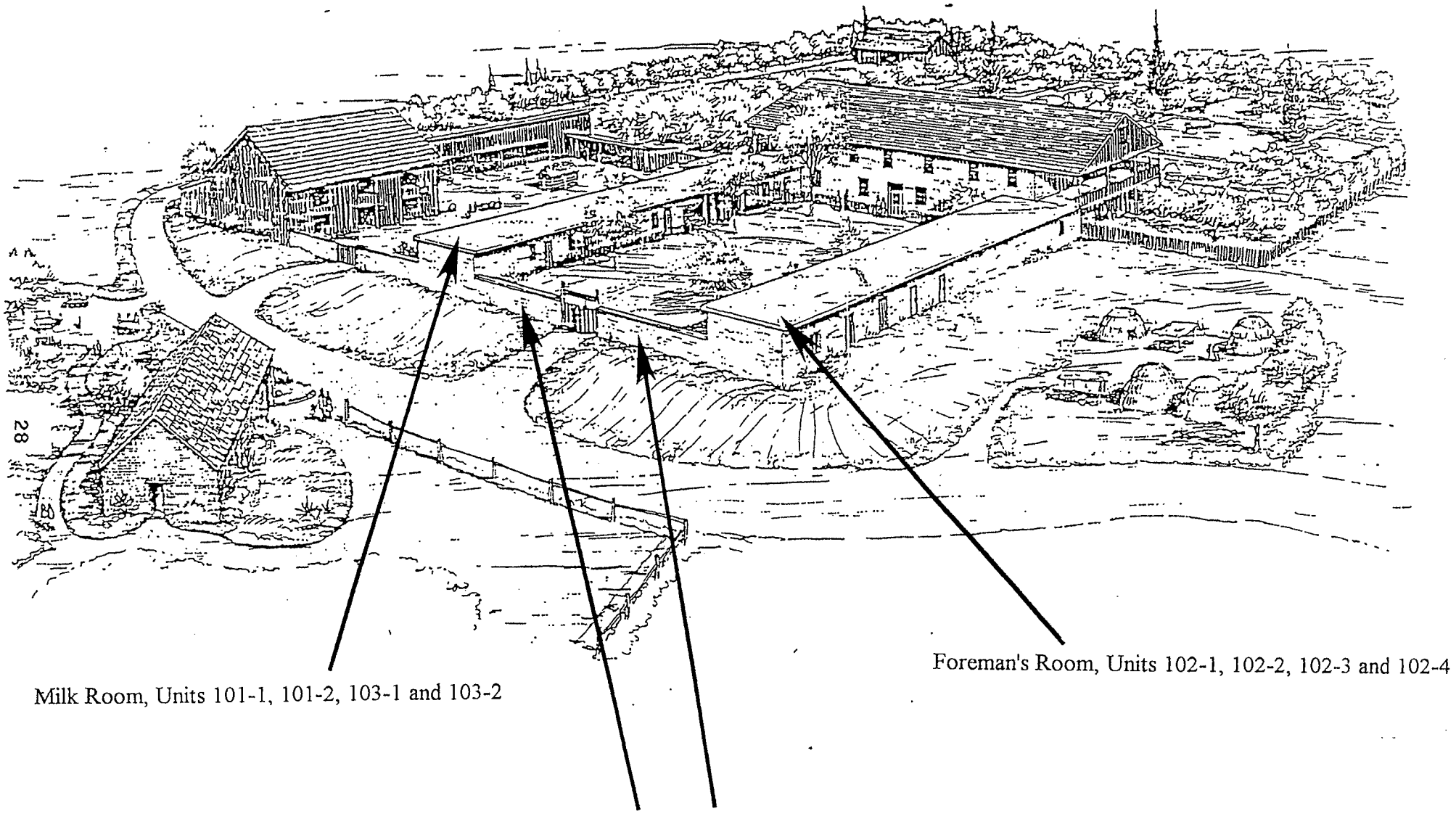


FIGURE 3: FOREMAN'S ROOM AND COURTYARD WALL EXCAVATIONS

FIGURE 4: RANCHO LOS CERRITOS AS IT APPEARED IN THE 1870S



provided to assist in visualization of the area of work and its relationship to the balance of the property. It is reproduced from the Rancho Los Cerritos Docent Training Manual and depicts the property as it appeared in the 1870s. The drawing is originally from the Historic Structure Report by Sanchez (1987).

Bone and shell material recovered during the excavations were analyzed by Joan Brown, RMW Paleo Associates. Her full comments are contained in Appendix C and will be referenced as appropriate in the following discussion.

A single prehistoric potsherd was recovered during the monitoring work at Rancho Los Cerritos. The sherd was found inside a fragment of adobe brick. The sherd was analyzed by Sue Wade, Cultural Resources Management. Wade's full report appears at Appendix D, and will be referenced in the following discussion.

Excavation Unit Descriptions:

Units 100 and 101: These two units were placed in the area beneath the courtyard wall after demolition of the wall. Both units were placed in areas where the footing for the new wall was to be excavated. The units were 100 by 50 centimeters in size. The units were seen as vital to an understanding of prehistoric deposition in the vicinity of the western end of the courtyard. The wall had probably been constructed as early as 1847 or 1848 and the base of the wall had since remained in place, protecting the underlying soils and whatever cultural material they contained. Observations during wall demolition confirmed that while the upper portion of the wall was repaired with brick from the 1930 modernization, most of the wall was adobe brick sitting directly on native soils.

Full details regarding the recovery from Units 100 and 101 are contained in the catalog in Appendix B. Both units were excavated to depths of 70 centimeters with a central posthole extending to about 130 centimeters.

Both units contained very little cultural material, but the distribution pattern was interesting. Historic material was found only in the upper levels. Unit 100 yielded two fragments of brick and one fragment of milled wood in the upper 20 centimeters. Unit 101 had only a fragment of plaster and a fragment of wire mesh in the upper 20 centimeters. No definite historic material was found below 20 centimeters. Admittedly, some of the sparse bone and shell could

have been from the historic era, but this is unlikely. The little definite historic material that was present was probably introduced during the demolition of the wall.

A few prehistoric items were found in the two units. Unit 100 had a fragment of a bone tool in the 30 to 40 centimeter level. Two secondary flakes, one chert and one metavolcanic, were recovered from the 40 to 50 centimeter level of Unit 101. The soil in the two units was uniform and dark throughout the depth.

Units 101-1 and 101-2: These two units were placed in the west room of the north wing, a room commonly referred to as the Milk Room (Rooms 127-130) and currently used as staff offices. This room was actually the Milk Room in the nineteenth century, and after 1930 it became the gardener's and chauffeur's areas. Both units were 100 by 50 centimeters in size. The units were placed about 20 centimeters from the west wall. Unit 101-1 was excavated to a depth of 110 centimeters, while Unit 101-2 was abandoned at 90 centimeters. These depths far exceeded the depths to which the lower courses of adobe brick extended. Unit 101-2 was later extended to the west to expose the wall and permit documentation of construction details in that area.

A concrete floor was in place in the Milk Room (Rooms 127-130) at the beginning of the project. Demolition disclosed that the floor was actually two pours of concrete, both finished, separated by a black waterproofing compound. This observation assisted greatly in understanding material collected in the Foreman's Room (Room 101), and will be discussed later. An example of the concrete and waterproofing was collected and has been assigned Catalog Number 1130.

In contrast to the units at the courtyard wall, the units in the Milk Room (Rooms 127-130) were relatively rich in historic material. The historic material, including ceramic sherds, glass shards, metal fragments, nail fragments, brick fragments and similar material, was scattered throughout the units. Brick, not known to have been widely used in this part of the rancho prior to the 1930 modernization, was found in the deepest levels of the units, indicating extensive disturbance during the 1930 work. Numerous large bones were found in the two units. A few could be identified as cow bones, thus they also belong to the historic era. Some egg shell material was also found in the upper levels and can be assigned to the historic era.

A ceramic sherd from the first level of Unit 101-1, Catalog Number 723, is a finely made

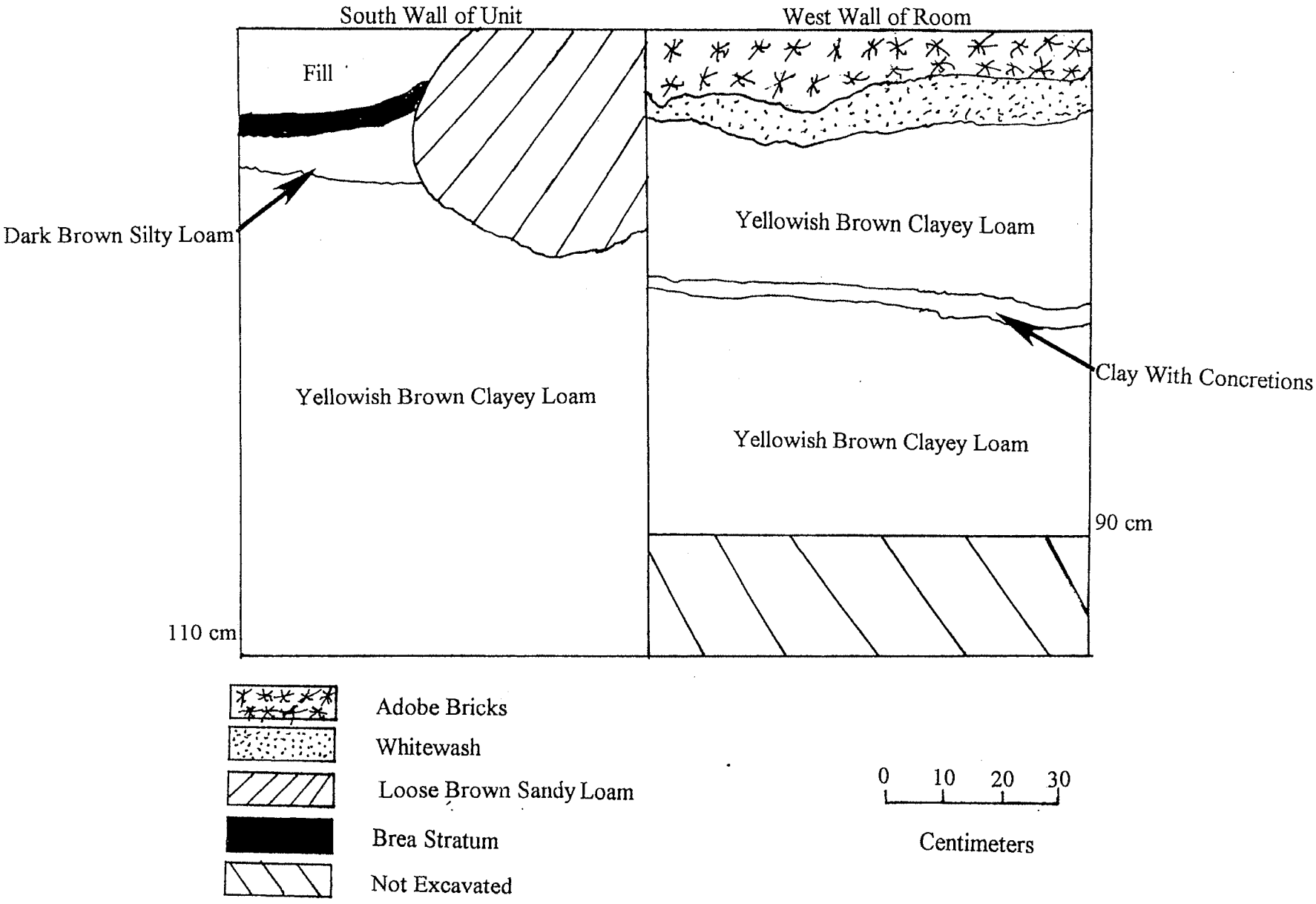
portion of a cup decorated with an English hunting scene. It is quite similar to an artifact (C59. 8.2) in the Rancho Los Cerritos collection. It also compares favorably to Catalog Number 814, recovered from the 60 to 70 centimeter level of the same unit.

Prehistoric material was present in very small quantities. Unit 101-1 contained a chert primary flake and a chert secondary flake in the 20 to 30 centimeter level, as well as a fragment of chert debitage in the 70 to 80 centimeter level. Unit 101-2 yielded a secondary chert flake from the 10 to 20 centimeter level, a bone tool fragment from the 20 to 30 centimeter level, a secondary metavolcanic flake from the 30 to 40 centimeter level and a fragment of chert debitage from the 40 to 50 centimeter level. It is probable that much of the shell and bone found in the units also dates to the prehistoric era.

Unit 101-2 was extended to the west as far as the adobe wall to allow documentation of the wall in that area. The profile drawing on the following page depicts the southern wall of the unit and the western wall of the unit where it exposed the wall. A thick layer of brea asphaltum was exposed in both units at about 15 to 20 centimeters depth. It should be kept in mind that this depth is measured from below the approximately 20 centimeters of concrete that was in the room at the beginning of the project. The brea stratum in Unit 101-2 did not extend to the west wall, but was separated from it by a deposit of loose, sandy loam. At first it was thought that the loam represented a shallow trench cut for the first courses of adobe bricks, but a similar feature was not present in Unit 101-1. Furthermore, the loam terminated the brea stratum, thought to be from the sealing of the original roof. The roof work, of course, would not have occurred until the adobe wall was in place, so the loam must represent some later disturbance. Whitewash on adobe plaster was detected on the wall to a depth of approximately 20 centimeters. The cementing agent had been almost entirely leached out, so the plaster had the appearance of clean sand and was extremely fragile. The whitewash and adobe plaster extended to about 20 centimeters depth, the same depth as the brea layer. Apparently, the original floor of the room was at about this depth.

Units 103-1 and 103-2: These two units were excavated in the Milk Room (Rooms 127-130) area to the east of Units 101-1 and 101-2. A modern wall was being demolished in this area, but an interior adobe wall had once stood there. The area where the adobe interior wall once

FIGURE 5: SOUTH AND WEST WALL PROFILE, UNIT 101-2



joined the exterior courtyard wall could be clearly seen. There was never any plaster in the area - it was left exposed in 1930.

The space available for excavation in the area of wall removal was quite limited. A bathroom occupied the northern end of the wall area on its western side and the soil below the removed wall was filled with water pipes, drains and electrical conduit. It was clear that the northern part of the wall area was extensively disturbed and that excavation in that area would not yield useful results. This restricted excavation to the southern part of the room, but the units, each one meter by 50 centimeters, had to be oriented with the long axis at right angles to the demolished wall. In one way the orientation was an advantage, since it provided access to a portion of the room interior as well as the area where the wall had stood. Both units were excavated to a depth of 80 centimeters.

The two units yielded historic artifacts throughout their depth, such as plaster fragments, brick fragments, wood fragments, nails and fragments, and similar material. Surprisingly, there was but little glass or ceramic items in the two units, a situation quite different from all other units except Units 100 and 101, under the courtyard wall, which were essentially sterile. Further, the few such items that were recovered were all in the upper levels of the units. A glass shard (Catalog Number 975) was recovered from the 10 centimeter level of Unit 103-1. The 10 centimeter level of Unit 103-2 yielded three ceramic pieces (Catalog Numbers 1031, 1032 and 1033), two glass shards (Catalog Numbers 1034 and 1035) and a fragment of a glass rod (Catalog Number 1045), possibly a fragment of a medicine applicator. Window pane shards (Catalog Numbers 1071 and 1074) were found in the 12 to 15 and 15 to 20 centimeter levels of the same unit.

Prehistoric material was found in both units. The prehistoric material is summarized in the table on the following page. It is probable that much of the bone and shell found in the two units is also from the prehistoric era.

Units 102-1, 102-2, 102-3 and 102-4: One prior excavation had been completed in the Foreman's Room (Room 101) by Greenwood (1987). The unit was one by one meter in size and was placed in the northeast corner of the room. The upper strata, extending to about five

Table 3: Prehistoric Recovery From Units 103-1 and 103-2			
Unit	Depth (cm)	Artifact	Catalog Number
103-1	0-10	Chert debitage	961
	10-20	Chert secondary flake	970
		Chert secondary flake	980
	30-40	Chert secondary flake	1001
	70-80	Chert secondary flake	1021
		Chert debitage	1022
103-2	20-30	Quartzite primary flake,	1104
		Chert secondary flake	1103
	40-50	Chert secondary flake	1112

centimeters was interpreted as overburden. While not directly stated, the overburden was probably placed to bring the floor level to the same level as the prior concrete floor. The concrete floor had been placed during the 1930 modernization, but was removed in 1980 or 1981 in order to repair a water leak. Another hard surface was encountered at five to eight centimeters. This surface was interpreted as a floor containing glass, ceramic fragments and bone. From the hard surface to a depth of 50 centimeters the unit contained nails, glass and shell, and was extensively disturbed by roots and rodents. Fallen fragments of adobe brick were also seen. The unit was excavated to 110 centimeters, where a change in soil was noted. This change occured adjacent to the lowest course of the adobe wall. Three chert flakes were recovered from the unit, at depths of 30 to 40, 40 to 50 and 90 to 110 centimeters. Greenwood was focused primarily on the architecture of the wall and foundation. Surprisingly, it was discovered that no foundation existed, a result repeated at two other units in the main house and the north wing.

Units 102-1, 102-2, 102-3 and 102-4 were placed equidistant from each other in a row about 30 centimeters from the west wall of the room, centered on the area to be disturbed by footing excavation. While details of the wall were of interest, the units were not placed adjacent to the wall, since the wall would have to be cleaned to the adobe before the concrete footing could be placed, thus providing ample opportunity for documentation. Units 102-1, 102-2 and

102-4, each 50 by 50 centimeters in size, were excavated first. Unit 102-3 was later moved north, to be immediately adjacent to, and an extension of, Unit 102-4. This was done to allow deeper excavation of both units. The two units (102-3 and 102-4) will be discussed as a single entity, since the relocation of Unit 102-3 effectively created one unit 100 by 50 centimeters in size.

A series of six hardened surfaces was encountered in Unit 102-1, including the upper floor surface, between zero and 30 centimeters depth. Seven such surfaces were found in Units 102-3 and 102-4. Only four similar surfaces were detectable in Unit 102-2, but this unit was more disturbed. An electrical conduit crossed the unit, apparently having been placed after the hardened surfaces had been created.

Below the hardened surfaces the soil was dark in color and contained a mixture of historic and prehistoric artifacts. An apparent color change in the soil near 140 centimeters depth proved to be the result of increasing moisture at depth. When dried, soils from various depths below 30 centimeters in all four units were remarkably uniform in color.

Unit 102-1 was the furthest south of the units excavated in the Foreman's Room (Room 101). The unit was excavated to 80 centimeters depth. Historic material in Unit 102-1 was unremarkable glass, metal fragments (some nails), ceramics, plaster and concrete fragments, but was present throughout the unit. Floral remains were preserved in the unit. A fragment of leaf and a seed hull were recovered from the 6 to 10 centimeter level, a fragment of wood bark was recovered from the 16 to 19 centimeter level, a sunflower seed was found at 19-21 centimeters, a wood fragment came from 24 to 30 centimeters, a fragment of milled wood was found at 30 to 40 centimeters, a wood fragment was found at 50 to 60 centimeters, and two wood fragments, one milled, were collected at 60 to 70 centimeters depth. This remarkable preservation argued strongly that the soils had not been in place for any great length of time.

Unit 102-1 contained a few prehistoric artifacts. A fragment of a bone tool came from 6 to 10 centimeters depth, a chert secondary flake was found at 24 to 30 centimeters depth, a fragment of chert debitage was found at 30 to 40 centimeters, and a fragment of chert debitage and a chert secondary flake were found in the 70 to 80 centimeter level. It is probable that much of the shell and bone found throughout the unit is also of prehistoric origin.

Unit 102-2 was to the north of Unit 102-1 and was also excavated to 80 centimeters

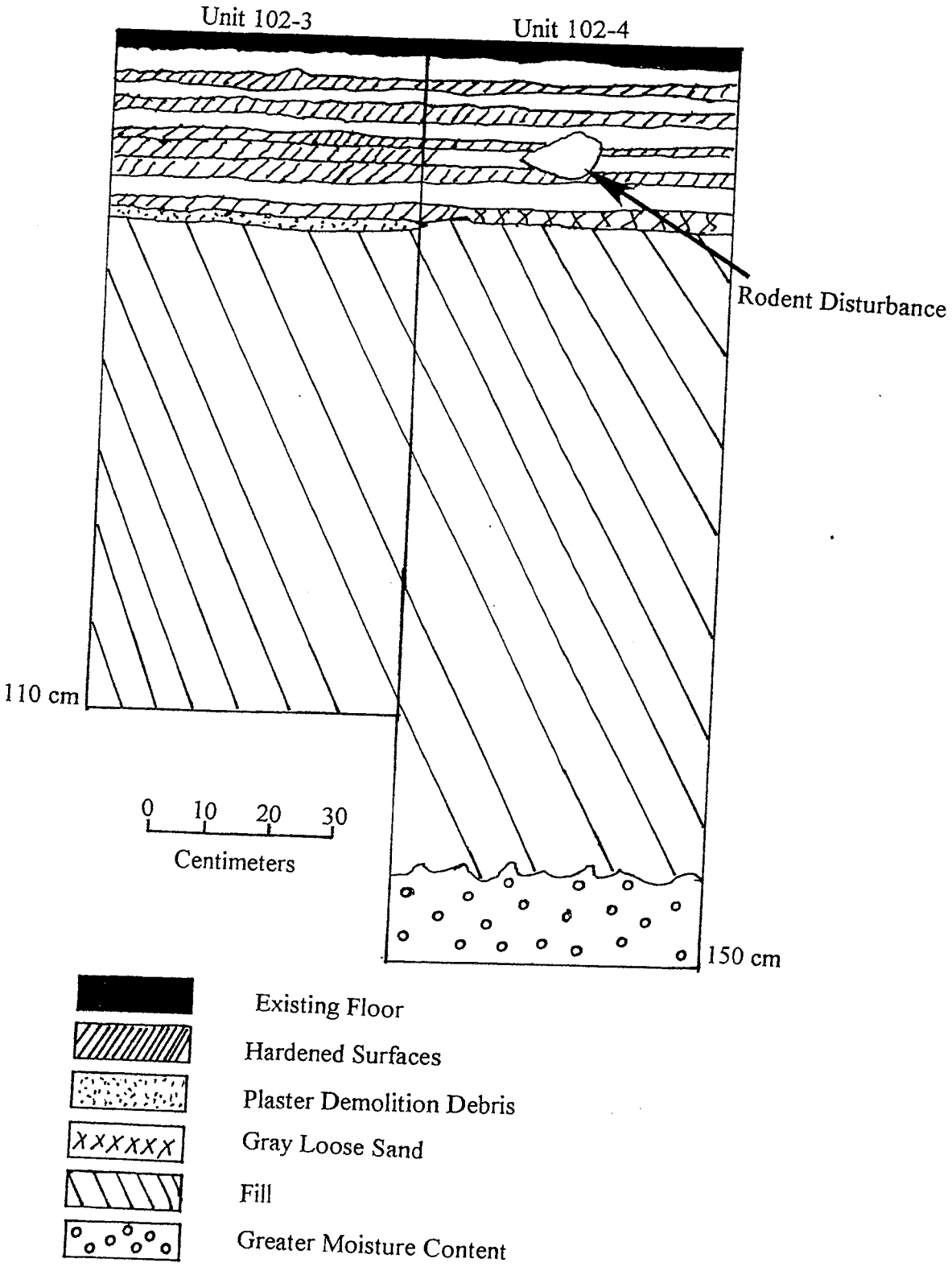
depth. Fewer hardened surfaces were encountered in the upper levels than in the other units, but this was probably due to the disturbance caused by an electrical conduit that had been emplaced across the unit. Since the conduit and the fixtures toward which it led were modern, it is surmised that the conduit is not part of the 1930 modernization, but from some later period. Apparently, no electrical work was accomplished in the room after 1930, until the system was rewired in 1985. It is also possible that the original 1930 conduit and fixtures were replaced when the floor was removed in 1980/81.

As with Unit 102-1, Unit 102-2 contained unremarkable historic debris throughout its depth. Floral material was also preserved and recovered in about the same quantities. One rather important artifact (Catalog Number 301) is a fragment of concrete with a black waterproofing material on one surface. This artifact appears identical to the concrete and waterproofing material observed in the Milk Room (Rooms 127-130) in the northern wing (see Catalog Number 1130 as an example of the material from the Milk Room). This artifact, and several similar pieces, establishes that the concrete floor in the Foreman's Room (Room 101) installed in the 1930s was quite similar to that in the Milk Room, that is, two pours separated by the waterproofing.. One bone from Unit 102-3 was identified as sheep, and it is likely that many of the larger bones are cow, thus dating to the historic era.

A chert primary flake and two chert secondary flakes were recovered from the 50 to 60 centimeter level of Unit 102-2. No other prehistoric material was found in the unit, but much of the shell and bone, found throughout the unit, is probably of prehistoric origin.

Units 102-3 and 102-4 were excavated immediately adjacent to each other, so can be treated as a single unit. Units 102-3 was excavated to 110 centimeters depth, while Unit 102-4 was excavated to 150 centimeters. Seven hardened surfaces were encountered in the upper 30 centimeters of the unit, below which was a very uniform, dark colored soil that was rather loose and contained a mixture of prehistoric and historic material. A change in the soil was observed at a depth of about 135 centimeters, but the change proved to result from increasing moisture. Soil from above and below the apparent change were identical when dried to a uniform moisture content. A profile drawing of the west wall of Units 102-3 and 102-4 appears on the following page.

FIGURE 6: WEST WALL PROFILE, UNITS 102-3 AND 102-4



Greenwood (1987) reported many roots and extensive rodent disturbance in the unit located in the northeast corner of the Foreman's Room (Room 101). Greenwood also described the soils at 100 centimeters as changing to a reddish color. Historic and prehistoric artifacts were encounterd in the Greenwood unit and in the units excavated during the current project at about the same frequency and the soil between the upper hardened surfaces and about 100 centimters depth appear quite similar. Nevertheless, very little detectable rodent disturbance and very few roots were encounterd in the units excavated as part of this project.

Floral material was found in Units 102-3 and 102-4 at the same frequency and depth as in Units 102-1 and 102-2. Again, the preservation of material such as leaves and seed pods is quite remarkable.

Nails, glass shards, brick fragments, plaster fragments, a few ceramic fragments and similar material was recovered from both Unit 102-3 and Unit 102-4. A small fragment of a copper sheet (Catalog Number 413) was recovered from the 40 to 50 centimeter level of Unit 102-3 and a copper rivet was found at 80 to 90 centimeters. Another very small fragment of copper was recovered from the 110 to 120 level of Unit 102-4.

A glass marble (Catalog Number 569) was encountered in the 30 to 40 centimeter level of Unit 102-4. There are similar marbles in the Flint family marble collection at Rancho Los Cerritos, dating to the 1880s. The Flints were cousins of the Bixbys. A ceramic button (Catalog Number 653) was recovered from the 40 to 50 centimeter level of Unit 102-4. The button is small, with four thread holes in a central, circular depression. The button is a Type 4, as described by Le Vine (1975), who preformed a detailed analysis of Rancho Los Cerritos buttons. The button is of a type commonly used on dress shirts. A shell button (Catalog Number 641) was recovered in the 90 to 100 centimeter level of Unit 102-4. This button is a Le Vine Type 8 and could have been from either a dress or shirt. A ceramic tableware fragment (Catalog Number 653), found in the 100 to 110 centimeter level of Unit 102-4, has a geometric flower pattern and probably dates to the early 1900s. A fragment of a cup or soup bowl (Catalog Number 700) recovered from the 130 to 140 centimeter depth of Unit 102-4 has a blue willow pattern and is very similar to a bowl in the Rancho Los Cerritos collection, Accession Number C64-9-4.

Units 102-3 and 102-4 also yielded a scattering of prehistoric material. This material is

summarized in the table on the following page.

Monitoring: In all cases where units were excavated, a large trench was cut to provide space for emplacement of concrete and steel footings to support the adobe walls. All footing excavation activity was monitored by an archaeologist and material was collected as it appeared. In the case of the single excavation in the Foreman's Room (Room 101) and the two excavations in the Milk Rooms (Rooms 127-130), the soil could be examined as it was being removed. There is a high degree of confidence that the recovered material came from somewhere in that particular excavation. The excavations for the courtyard wall and the entry way were different in that a great deal of disturbance and soil mixture took place while the excavation and monitoring was in progress. Much of the collected material is certainly from the excavation where it is cataloged, but it must be understood that some material may be from surrounding soils.

North Courtyard Wall: Seven artifacts, two bones and a shell fragment were recovered from the North Courtyard Wall area. These include five glass items, including bottle necks and bodies. A singletree cleat (Catalog Number 1163) is the most interesting artifact found. It is hand made, probably in the Rancho Los Cerritos blacksmith shop. One fragment of chert debitage (Catalog Number 1161) represents the only prehistoric material. Interestingly, the debitage was inside a fragment of an adobe brick. One of the bones is a fragment of cow rib dating to the historic era.

South Courtyard Wall: Nine whole and fragmentary bricks were collected from the South Courtyard Wall area. It will be recalled that the original wall in this area was adobe that had been repaired with brick on top of the adobe, and that essentially sterile conditions were encountered in the units placed here. Since the wall footing was wider than the original wall, the bricks probably represent material from the 1930s repairs, dropped while that activity was taking place. A sample of adobe and another of mortar were collected. These were probably from the original courtyard wall. Four glass shards, all apparently from various bottles, were recovered, as were two nails and a fragment of unidentifiable metal. A railroad tie plate with two spikes was recovered during the monitoring. A fragment of plaster with adhering metal mesh identical to that used in the 1930 modernization was recovered. A fragment of milled wood, apparently a fragment of a handle of some sort was also recovered. This may have been from an early courtyard gate.

Table 4: Prehistoric Recovery From Units 102-3 and 102-4			
Unit	Depth (cm)	Artifact	Catalog Number
102-3	31-40	Chert primary flake	396
	40-50	Chert secondary flake	412
	50-60	Chert secondary flake	420
	60-70	Chert secondary flake	431
		Chert secondary flake	432
	70-80	Chert secondary flake	454
102-4	40-50	Chert debitage	585
		Metavolcanic debitage	586
		Quartz fragment	587
	60-70	Bone tool fragment	613
	70-80	Chert debitage	625
	100-110	Chert debitage	650
	110-120	Bone tool fragment	676
		Bone tool fragment	677
		Chert debitage	675
	140-150	Chert debitage	713
		Chert debitage	714

Four bones were recovered in the South Courtyard Wall area, and two could be identified as cow. The other two are large enough to have been from a cow sized animal. All of these bones probably date to the historic era.

No prehistoric artifacts were recovered from the South Courtyard Wall area, but three shell fragments may be either historic or prehistoric.

Courtyard Entry: The entry footing area was shallower than the other excavations, but covered a much larger area. Historic artifact recovery in the entry area was quite high. The gate

funneled all traffic through the immediate area, so it is not surprising that an accumulation of artifacts was found there. The historic material is summarized in the following table:

Table 5: Historic Recovery From the Courtyard Entry Area

Artifact	Number	Catalog Numbers
Brick fragments	2	1313, 1314
Ceramic bowl fragment	1	1318
Ceramic plate fragment	1	1317
Ceramic fragments, unidentifiable	3	1319, 1320, 1321
Bottle fragments	4	1322, 1323, 1324, 1325
Window pane fragment	1	1326
Glass fragments, unidentifiable	6	1327, 1328, 1329
Metal barrel hoop fragment	1	1330
Nails	7	1315, 1316
.22 caliber shell casing	1	1311
Harness fragment, leather and rivet	1	1312
Milled wood fragment	1	1310

Two bone fragments, a portion of a sheep scapula and part of a large unidentifiable rib, were recovered in the Courtyard Entry area. A few fragments of shell were also recovered, but there were no definite prehistoric artifacts.

Milk Room Trench: Two trenches were excavated in the Milk Room (Rooms 127-130). The first was adjacent to the west wall of the Milk Room in the area where Units 101-1 and 101-2 were excavated. This trench contained numerous historic artifacts. The second trench was located to the east where Units 103-1 and 103-2 were excavated. No material of interest was recovered from this trench. It will be recalled that several artifacts were recovered from Units 103-1 and 103-2, but the two units extended into the floor areas in the rooms adjacent to the demolished modern wall, which had, in turn, replaced an original adobe wall. The trench itself

covered only the area where the wall had stood, so it is not surprising that no artifacts had accumulated there.

The vast majority of the historic artifacts recovered from the Milk Room (Rooms 127-130) trench were nails of various kinds and ages. The nails are described in Catalog Numbers 1349 through 1357. Many of the nails are cut, indicating earlier age, but others are clearly modern. Most of the nails probably relate to the 1930 modernization and later activities.

One interesting artifact, Catalog Number 1348, is a circular piece of adobe plaster, perfectly flat on its lower surface and rounded on the upper. Apparently, this object fell from some distance while still pliable onto a hard surface and then remained there until completely set. Four glass shards were recovered from the trench, and one is apparently from a bottle. One glass shard, Catalog Number 1346, is a fragment of a glass tube that may have been a thermometer or medicine applicator. A sunflower seed was also recovered from the trench.

Bones were common in the Milk Room (Rooms 127-130) trench. Rabbit, gopher, sheep and cow were among the identified bones. While most of the bone could not be identified, many were large enough to have been from either sheep or cow. A few of the bones had been partially burned. A quantity of shell was also recovered from the trench. No prehistoric artifacts were recovered during monitoring of the Milk Room trench.

Foreman's Room Trench: The Foreman's Room trench was by far the most extensive of the excavations made for footing construction. Units 102-1, 102-2, 102-3 and 102-4 were excavated in this area, and while extensively disturbed they were relatively rich in historic material. Consequently, more material was recovered in the Foreman's Room trench than in other areas. The historic material is summarized in the table on the following page.

One of the bricks from the Foreman's Room (Room 101) trench, Catalog Number 1218, was the only brick recovered during the project containing an identifiable maker's mark. In a rectangular depressed area the letters --MONS can be seen. This brick came from the Simons brick factory, active in Los Angeles from the early 1900s to the 1940s (Gurcke 1987).

The fragment of concrete with waterproofing, Catalog Number 1200, is identical to material from the Milk Room (Rooms 127-130) where two concrete floors were separated by a waterproofing material. This establishes that the concrete floor that existed in the Foreman's

Table 6: Historic Recovery From the Foreman's Room Trench

Artifact	Number	Catalog Numbers
Adobe fragment	1	1250
Brick	1	1218 (see discussion)
Brick fragments	7	1176, 1251, 1297, 1298
Ceramic pitcher handle	1	1255
Ceramic plate fragments	3	1201
Ceramic fragments, unidentifiable	3	1203, 1256, 1257
Concrete with waterproofing	1	1200 (see discussion)
Fired clay fragment	1	1177
Glass container fragments	12	1178, 1179, 1207, 1205, 1209, 1254, 1206
Glass bottle fragments	2	1258, 1340
Window pane fragment	1	1208
Glass fragments, unidentifiable	9	1180, 1210, 1253
Shoe insole, eyelet and strap	1	1202
Harness hardware	1	1192
Nails	12	1193 - 1198, 1217, 1276
Railroad spike	1	1341
Plaster fragment	1	1273
Bakelite fragment	1	1248
Clay tile fragments	3	1252
Milled wood fragments	8	1175, 1191, 1249, 1299

Room (Room 101) was of similar construction.

Many bones were found in the Foreman's Room trench. Identifiable animals included turkey, rabbit, cow, ground squirrel and sheep. Many of the unidentified bones are large enough to have been from sheep or cow.

Only one prehistoric artifact was recovered during the Foreman's Room (Room 101)

trench excavation, but it is most interesting. The artifact, Catalog Number 1384, is a pottery sherd recovered from inside an adobe brick fragment. The sherd, analyzed by Sue Wade, is a type of Colorado Buff ware, uncommon in this area. Wade's full report is at Appendix D. Wade concludes that the sherd most likely originated in the Colorado Desert region of eastern California or western Arizona. It is a Late Period piece, and establishes that there was trade between the Rancho Los Cerritos and Colorado River areas.

Foreman's Room Wall Cleaning: The construction crew was asked to not excavate completely to the adobe walls in the Foreman's Room (Room 101). The soil was carefully removed from the wall, artifacts that appeared were collected and the details of the wall were documented. All of the west wall was exposed, as were portions of the north and south walls.

Historic artifacts recovered during the wall cleaning are summarized in the table below.

Table 7: Historic Recovery From the Foreman's Room Wall Cleaning

Artifact	Number	Catalog Numbers
Adobe plaster	1	1263
Brick fragment	1	1261
Bottle fragment	1	1259
Glass marble	1	1262
Nail	2	1169, 1269
Shell button	1	1270 (see discussion)
Brick fragments	2	1274, 1275 (see discussion)
Whitewash, asphaltum	1	1271 (see discussion)
Asphaltum sample	1	1170
Chamber pot fragments	4	1165
Glass container fragments	4	1167, 1171
Ceramic plate fragment	2	1168
Milled wood fragment	1	1172
Whitewash, adobe plaster	1	1272 (see discussion)

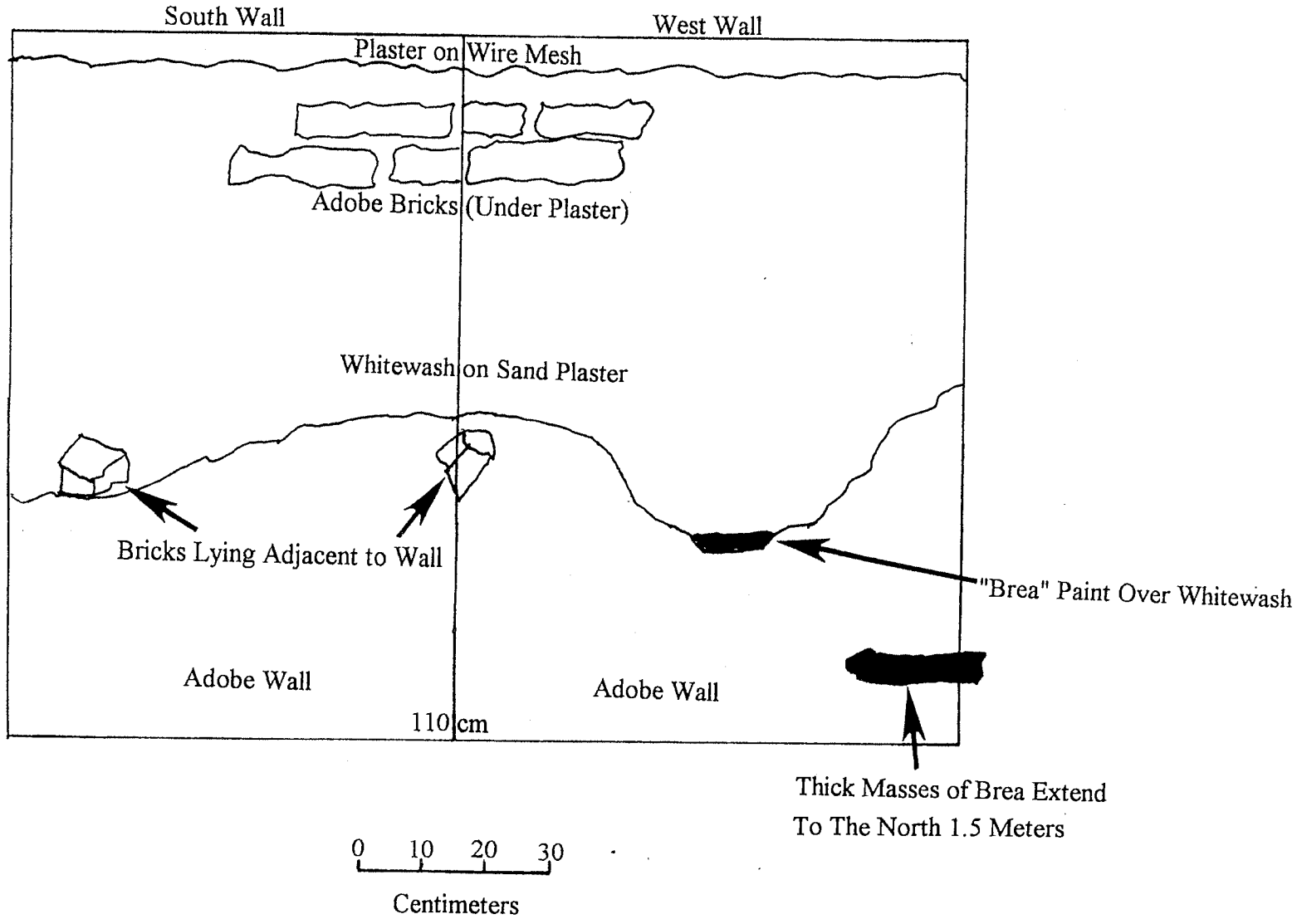
The shell button (Catalog Number 1270) is a Le Vine (1975) Type 10, commonly used on dress shirts.

The two brick fragments (Catalog Number 1274 and 1275) were both discovered lying in contact with the wall at the deepest depth of excavation. While described as fragments, each example is nearly one half of a full brick. The locations where these two items were found are shown on the wall drawing on the following page.

The entire wall to nearly the deepest level of excavation was covered with whitewash. The whitewash covered a layer of plaster from which the cementing agent had been almost entirely leached. The plaster had the appearance of clean sand and crumbled at the lightest touch. Catalog Number 1272 is an example of the whitewash and plaster. The extent of the visible whitewash can be seen on the drawing on the following page. The whitewash at depth was in poorer condition than the whitewash at shallower levels, but a stripe of black paint could be detected at the same level in places along the wall. Actually, the "paint" appears to be a thin layer of the brea asphaltum used to seal the original roof. A sample of this material is preserved as Catalog Number 1271. The location of the "paint" stripe is shown on the drawing on the following page. A thick layer of brea asphaltum was noted along much of the wall, at depths below the stripe. It is probable that the brea layer represents material introduced when the original roof was being sealed. The original slope of the terrain in the area of the Foreman's Room (Room 101) was downward from east to west. Judging from existing slopes, the western part of the Foreman's Room was probably about 40 centimeters lower than the eastern part. Certainly, this slope would have been leveled before anyone lived in the room. This could have been done by moving soil from the eastern part of the room to the western or by importing fill material to place in the western part of the room.

Figure 7, on the following page, depicts a dense layer of brea asphaltum near the bottom of the Foreman's Room (Room 101) trench. This layer could be traced along most of the length of the western wall at approximately the depth shown in Figure 7. It is thought that this layer of brea was from leakage during the time when the original roof was being sealed. If this is correct, the brea layer represents the lowest level of historic occupation in the room. The brea appeared to be puddled against the west wall, and did not extend more than 15 to 20 centimeters into the

FIGURE 7: SOUTH AND WEST WALL PROFILE, FOREMAN'S ROOM



room. Since the original ground surface sloped from east to west, this puddling against the west wall would occur if the floor of the room had not yet been leveled. Similar strata of brea were noted in the Milk Rooms, but were much more disturbed.

DISCUSSION

Introduction: Earlier in this report a series of hypotheses, formulated to guide the project work, was presented. These hypotheses provide the basis for the following discussions.

Hypothesis 1: Original architectural features will be revealed during the excavations.

One of the most important observations made during this project is that the Foreman's Room (Room 101) soil, penetrated to 150 centimeters depth from the floor level, is entirely fill, emplaced during the 1930 modernization. There are several lines of evidence pointing to this conclusion. First, the inside wall was finished with plaster and whitewash (See Figure 7). This finishing would not have been done unless the wall once formed part of a living space. Secondly, brick halves were found at the deepest levels adjacent to the walls. These fragments are identical to the bricks known to have been used during the 1930 modernization. They were found at such depths because the fill in the room was emplaced only after the repair work on the walls and windows had been completed. Lastly, pictures of Rancho Los Cerritos taken at the time of the 1930 modernization and before, clearly show a door in the south wall of the Foreman's Room (Room 101), opposite the current door, entering at the level of the exterior ground surface. This is about at the same level as the deepest excavations in the room interior. The pictures are in the Rancho Los Cerritos collection and are identified as CHP 0048b (November 1930) and CHP 0045 (July 1930).

The fill in the Foreman's Room (Room 101) was thus placed as part of the 1930 modernization, probably to bring the floor level up to that of the balance of the south wing. Accordingly, the fill itself can be thought of as an architectural detail. The fill contained numerous historic and prehistoric artifacts and ecofacts. The bulk of these were originally deposited in some exterior area and brought to the Foreman's Room as part of the fill. Earlier excavations to the southwest of the Foreman's Room were interpreted as an adobe borrow pit subsequently filled with trash. This fill probably dates to the J. Temple period (1844-1866). Considerable regrading

was accomplished in 1930 in the courtyard, west and north of the hillsides and along the entry road. It is probable that the fill in the Foreman's Room was derived from these areas. This would also account for the seeds, leaves and husks found in the room. Such material would have been picked up with the fill, but since it was only placed in 1930, sufficient time has not elapsed for it to completely decay.

The prehistoric material found in the Foreman's Room (Room 101) clearly indicates a prehistoric presence in the area, but the material is very sparse. It is probable that the area from which the fill was taken is on the periphery of a much larger prehistoric deposit, or as stated above, the fill was taken from several areas.

The hardened surfaces in the upper 30 centimeters of the Foreman's Room (Room 101) were originally thought to be living floors, but this notion was abandoned when it became clear that the room had been filled in 1930. Apparently, the bulk of the fill was placed with little compaction, but as the desired floor level was approached the material was compacted to provide support for the upper concrete floor. At the beginning of the project the floor was at the level of the door sill. This is probably the same level as the original concrete floor, which is thought to have been about 20 centimeters in thickness, based on observation of the removal of the floor from the Milk Room (Rooms 127-130). Apparently, when the concrete floor was removed in the early 1980s to repair a water leak, more fill material was brought in and compacted to bring the new soil floor to the level of the removed concrete floor. Thus, the numerous compacted surfaces in the upper levels of the Foreman's Room are probably a combination of material introduced in 1930 and in the 1980s.

While the original living floor was quite deep in the Foreman's Room (Room 101), such was not the case in the Milk Room (See Figure 4). In the Milk Room (Rooms 127-130) the adobe wall and its covering of sand plaster and whitewash extended to only about 25 centimeters below the level of the concrete floors. This is thought to be about the depth of the original living floor, but while fragments of hardened surfaces were found, none extended for any great distance. It was clear that disturbance was extensive and that much mixing had taken place. Fill, the bulk of the deposit in the Foreman's Room, was present in only minor quantities in the Milk Room.

The excavations confirmed that no foundation exists under the Foreman's and Milk Room

walls. No foundation was found under the Courtyard Wall, but the replacement wall certainly has a deep footing. These observations confirm the observations of Greenwood (1987) that Rancho Los Cerritos was constructed without foundation. The lack of a foundation is a rather unique architectural method, adding to the historical importance of Rancho Los Cerritos.

Demolition of the modern wall in the Milk Room (Rooms 127-130) revealed a vertical area of broken adobe bricks marking the beginning of the original adobe wall. The adobe bricks had been laid in stretcher bond with the interior wall incorporated. In other words, the south wall of the Milk Room and the interior adobe wall were constructed at the same time.

In summary, it is clear that archaeological methods can reveal architectural details related to original construction and to subsequent repair and modernization work. Hypothesis 1 is supported by the findings of this project.

Hypothesis 2: Artifact or feature patterns will reveal functional divisions of the interior space.

Very few definite features were encountered during the excavations at Rancho Los Cerritos. The features that were observed were associated with the architecture, wall details, hardened surfaces and the like.

No artifact associations within the portion of the Rancho Los Cerritos soils explored during this project were detected. Even those chance occurrences where similar artifacts were found close together could not be described as associations, since the matrix material was clearly fill or extensively disturbed.

While Hypothesis 2 is not supported by the current work, the conditions where the excavations occurred were unusual. In most instances, features and artifact associations can be expected when excavating interior rooms with a long period of occupation.

Hypothesis 3: In situ historic deposits will be encountered in the rooms where excavations are to be made. Such deposits will be important.

The excavated soils in the Foreman's Room (Room 101) were fill that had been brought in from somewhere outside the building. The material contained in such soils cannot be considered as in situ, at least if one is referring to the original point of deposition. The fill material and the artifacts contained therein, however, represent activities related to the 1930 modernization and

can be considered as in situ when viewed in this narrow sense. The artifacts and ecofacts within the fill cannot be used to make positive statements regarding the early occupation, but they do demonstrate, in part, how the 1930 modernization was accomplished. A limited number of artifacts, the brick halves found at the deepest levels in the Foreman's Room (Room 101) were in situ, but were also related to the 1930 modernization.

Since the 1930 work at Rancho Los Cerritos is now of sufficient age to have historic importance, it must be concluded that Hypothesis 3 is supported. It must be understood that this conclusion applies only in a limited sense to the fill and a few artifacts clearly dating to the 1930s, but not to the older historic material and prehistoric material contained within the fill.

Hypothesis 4: In situ prehistoric deposits will be encountered in the rooms where excavations are to be made. Such deposits will be important.

No in situ prehistoric material was found in any of the rooms excavated during this project. In the Foreman's Room (Room 101) such deposits may be present at deeper levels than were excavated during this project. The excavations in the Foreman's Room had no clear change in the soils to the deepest depth explored, so it is quite possible that the original soil surface was not exposed. Since the scattered prehistoric remains present in the fill establish that a prehistoric site is nearby, it is possible that such material is present under the Foreman's Room.

The excavations in the Milk Room (Rooms 127-130) did penetrate for some distance into native soils. No in situ prehistoric material was encountered in these excavations.

Hypothesis 4 is not supported by the current work.

Hypothesis 5: In situ historic deposits will not be encountered in the excavations under the courtyard wall.

The only historic material found in the courtyard wall footing excavations were in the upper few centimeters of soil and could have been easily introduced during the demolition of the wall.

Hypothesis five is supported by the current work.

Hypothesis 6: In situ prehistoric deposits will be encountered in the excavations under the courtyard wall. Such deposits will be important.

Prior to the beginning of the excavation it was known that a prehistoric deposit exists

somewhere in the immediate area. Prehistoric material in the form of cogstones and discoidals was recovered from somewhere within the building when excavations were made for plumbing and floor furnaces in 1930, though the exact area is not known. Since the courtyard wall had been in place since the mid 1840s, it was surmised that, if a prehistoric deposit was present in the area, excavations under the wall would disclose it. Very little prehistoric material was recovered from the courtyard wall excavations. The few fragments that were found were widely scattered and it is obvious that no extensive prehistoric deposition occurred here. No importance can be attached to few prehistoric items that were recovered.

Hypothesis 6 is not supported by the current work

Hypothesis 7: The study will confirm the worthiness of the structure for listing as a National Register of Historic Places property.

Several important observations were made during the current study. The Foreman's Room (Room 101) was filled during the 1930 modernization. This filling preserved large portions of plaster and whitewash, the original interior wall covering. This observation was made along the western wall and part of the southern wall in the Foreman's Room. It is clear that the fill has preserved the original wall covering. Probably the same conditions prevail at depth along the eastern wall. The same conditions probably prevail in the rooms to the east of the Foreman's Room. Apparently, these rooms also received some fill during the 1930 modernization. In other words, a great deal of the original treatment of the interior walls is probably preserved in the South Wing. The importance of this cannot be over stressed. Preservation of original interior wall treatment is very rare.

The observation that Rancho Los Cerritos was constructed without a substantial foundation, originally made by Greenwood (1987) and confirmed during this study, is very important. Buildings of this size almost invariably have some sort of foundation, and the lack of one at Rancho Los Cerritos makes the building unique.

Hypothesis 7 is supported by the current work. Clearly, Rancho Los Cerritos deserves its status as a National Register property.

CONCLUSIONS

The work at Rancho Los Cerritos completed during the current project consisted of excavations in areas where footings were to be constructed and monitoring of the remaining soil removals. While in situ artifacts were very rare, important architectural details were documented and the overall importance of Rancho Los Cerritos was reaffirmed. No additional archaeological work relative to the seismic upgrade of the structure is required.

It is recommended that Rancho Los Cerritos staff use extreme care when any sort of excavation within the south wing is contemplated. The interior walls of at least the westernmost rooms of the south wing have preserved under fill the original plaster and whitewash used to cover the adobe bricks. While not encountered during this project, it is quite possible that features such as niches and hanging brackets have been preserved. The plaster and whitewash are extremely fragile. Excavators should be prepared to preserve as much of this delicate material as possible when excavating in this part of the structure.

All artifacts, ecofacts and samples collected during the project, as well as all documentation and photographs generated during the work are curated at Rancho Los Cerritos.

Ronald M. Bissell

Ronald M. Bissell
Principal Investigator

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INITIAL STUDY

1. **Project title:**
   Rancho Los Cerritos

2. **Lead agency name and address:**
   City of Long Beach Planning Commission
   333 W. Ocean Boulevard
   Long Beach, CA 91711

3. **Contact person and phone number:**
   Robert A. Wise
   Environmental Planning
   333 West Ocean Boulevard, 5th Floor
   Long Beach, CA
   (562) 570-5081

4. **Project location:**
   4600 Virginia Road
   Long Beach, CA 90807

5. **Project sponsor's name and address:**
   Dennis Eschen
   2670 Studebaker Rd.
   Long Beach, CA 90807

6. **General plan designation:**
   LUD-11

7. **Zoning:**
   Institutional (I)

8. **Description of project:**

Rancho Los Cerritos is a National, State and Local Historical Landmark owned and operated by the City of Long Beach since 1955 as a public museum and historic site. Built in 1844, the two story abode and landscaped grounds echo with the rich history of Spanish, Mexican and American California, and the families who helped transform Southern California from its ranching beginning to a modern, urban society. In the late 19th century, the 27,000-acre cattle and sheep pastures of the Rancho began to decrease as the cities of Long Beach, Lakewood, Bellflower, Paramount, and Signal Hill began to develop and attract an increasing population. Today the Rancho is open for public tours and offers garden activities, lectures, workshops, family events and school trips. The Rancho has an active volunteer program and a California History Research Library.

The Master Plan for Rancho Los Cerritos is designed to serve as a guide for site development

and interpretation, and includes sections on structural and landscape restoration, maintenance, educational programming, visitor amenities, staff accommodations and collection needs. The site's primary educational goal is to interpret the relationship of the Rancho's diverse peoples to the development of the greater Long Beach area between the 1840s to 1940s. Most alterations made in 1930-1931 to the historic adobe and landscaped grounds will be restored and preserved, and several nineteenth century buildings will be reconstructed in accordance with the Secretary of the Interior's Standards of Historic Preservation. Additional recommendations were guided by security needs, aesthetic improvements, historical authenticity and a desire to preserve remaining views and the rural character of the site. The Master Plan provides for the phased development over a 25-year period.

To achieve the objectives of the Master Plan, Rancho Los Cerritos proposes to make the following improvements to the Rancho site:

1. Demolition:
   a. City added public restrooms,
   b. City added parking lot, and
   c. City added patio area.
2. Develop,
   a. Visitor Center measuring 50'x 25' external dimensions, with a basement of 966 sq. feet, a ground floor of 966 sq. feet and Restroom add-on of 190 sq. feet.
   b. Barn Complex with a foot print of 50' x 40' for the main building; and 80'x 20' for the utility buildings. The Barn Complex will consist of a basement of 3,600 sq. feet, a first floor of 3,600 sq. feet and a second floor of 2,000 sq. feet. this structure will be used as staff office space, storage, a reception area for visitors and a museum.
   c. Caretaker's House of 800 sq. feet
   d. Additional Restrooms with a footprint of 20' x 8' feet.

9. Surrounding land uses and setting:

Rancho Los Cerritos is located within a community dominated with large estate style homes and a country club. The surrounding setting of mature trees and rural appearance make the general aesthetic value of the area very picturesque. The entrance of the Rancho is not adjacent to any homes and is located north of the entrance to the country club. The nearest signal family residences are located past the entrance of the Rancho, on the northern perimeter of the Rancho.

10. Other public agencies whose approval is required:

City of Long Beach Planning and Building
City of Long Beach City Council
City of Long Beach Planning Commission

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

Aesthetics		Agriculture Resources		Air Quality	
Biological Resources	√	Cultural Resources		Geology /Soils	
Hazards & Hazardous Materials		Hydrology / Water Quality	√	Land Use / Planning	
Mineral Resources	√	Noise		Population / Housing	
Public Services		Recreation	√	Transportation/Traffic	
Utilities / Service Systems		Mandatory Findings of Significance			

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. √

I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

_____

Signature Date

Printed Name

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less than Significant with "Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced) .

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration Section 1 5063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.

   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the score of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated", describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats.

9) The explanation of each issue should identify:

   a) the significance criteria or threshold, if any, used to evaluate each question; and

   b) the mitigation measure identified, if any, to reduce the impact to less than significance.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No impact
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?				√
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			√	
c) Substantially degrade the existing visual character or quality of the site and its surroundings?				√
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				√
II. AGRICULTURE RESOURCES -- In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				√
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				√
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				√
III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable Air Quality Attainment Plan?				√
b) Violate any air quality standard or contribute to an existing or projected air quality violation?				√

	Potentially	Less Than Significant With	Less Than

	Significant Impact	Mitigation Incorporation	Significant Impact	No impact
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				√
d) Expose sensitive receptors to substantial pollutant concentrations?			√	
e) Create objectionable odors affecting a substantial number of people?				√
IV. BIOLOGICAL RESOURCES -- Would the project:				
a) Have a substantial adverse impact, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U. S. Fish and Wildlife Service?				√
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U. S. Fish and Wildlife Service?				√
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				√
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				√

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				√
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?				√
V. CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	√			
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	√			
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	√			
d) Disturb any human remains, including those interred outside of formal cemeteries?				√
VI. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				√
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			√	
ii) Strong seismic ground shaking?			√	

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No impact
iii) Seismic-related ground failure, including liquefaction?			√	
iv) Landslides?				√
b) Result in substantial soil erosion or the loss of topsoil?				√
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				√
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				√
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				√
VII. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				√
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				√
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				√
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				√
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				√

	Potentially	Less Than Significant With	Less Than

	Significant Impact	Mitigation Incorporation	Significant Impact	No impact
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				√
9) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				√
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				√
VIII. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?				√
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				√
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			√	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				√
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				√
f) Otherwise substantially degrade water quality?				√

Incorporation	Potentially Significant Impact	Less Than Significant With Mitigation Impact	Less Than Significant Impact	No Impact
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				√
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				√
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				√
j) Inundation by seiche, tsunami, or mudflow?				√
IX. LAND USE AND PLANNING -- Would the project:				
a) Physically divide an established community?				√
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?		√		
c) Conflict with any applicable habitat conservation plan or natural communities conservation plan?				√
X. MINERAL RESOURCES -- Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				√
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				√
XI. NOISE -- Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?		√		
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			√	

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No impact
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				√
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		√		
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				√
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				√
XII. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				√
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				√
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				√
XIII. PUBLIC SERVICES -- Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?				√
b) Police protection?				√
c) Schools?				√

	Potentially	Less Than Significant With	Less Than

	Significant Impact	Mitigation Incorporation	Significant Impact	No impact
d) Parks?				√
e) Other public facilities?				√
XIV. RECREATION --				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				√
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				√
XV. TRANSPORTATION/TRAFFIC -- Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	√			
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				√
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				√
d) Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				√
e) Result in inadequate emergency access?		√		
f) Result in inadequate parking capacity?	√			
9) Conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				√

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No impact
XVI. UTILITIES AND SERVICE SYSTEMS --				
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				√
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				√
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				√
d) Have sufficient water supplies available to serve the project from existing entitlement and resources, or are new or expanded entitlement needed?				√
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				√
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				√
g) Comply with federal, state, and local statutes and regulations related to solid waste?				√
XVII. MANDATORY FINDINGS OF SIGNIFICANCE --				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?				√

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No impact
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				√
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				√

I. AESTHETICS

Rancho Los Cerritos is a unique historical site within the City of Long Beach. It is on the National Register and provides a physical link to California's past. Any development or renovation to the Rancho could, if improperly performed, have a significant impact to the historical value of the site. While most of the discussion regarding the impact to the historical value of the Rancho will be discussed under Cultural Resources in the Draft Environmental Impact Report, the report should also address any potential impacts to the aesthetic importance of Rancho Los Cerritos.

II. AGRICULTURAL RESOURCES

Rancho Los Cerritos consists of 4.74 acres of land and is bordered by the Virginia Country Club on two sides, and single family residential on the other two sides. The City of Long Beach has developed around the Rancho and is highly urbanized.

Development of the proposed project will not result in any significant impact to agricultural resources as defined in the California Agricultural Land Evaluation and Site Model (1997) prepared by the California Department of Conservation. The proposed project is not located on farmland or within an agricultural zone.

III. AIR QUALITY

The air quality in the project area is generally good and influenced by the marine wind pattern. The Draft Environmental Impact Report should evaluate potential air pollutant emissions resulting from the increased vehicle trips to Rancho Los Cerritos.

IV. BIOLOGICAL

The adobe abode and surrounding land of Rancho Los Cerritos was established in 1844 and once encompassed 27,000 acres. As cities began to develop, the area of rangeland of the Rancho continued to decrease along with native plant and animal life. Today the Rancho consists of 4.72 acres with no animal of plant life identified as endangered or threatened by the California Department of Fish and Game on the site.

There are many trees at Rancho Los Cerritos that may be considered to be of historical significance. Among these tree are those planted during the Temple Family period (1844-1866), the early Bixby Family period (1866-1930) and the Bixby / Cornell Family period (1930-1954). The Draft Environmental Impact Report should address the proposed project impact to these trees.

V. CULTURAL RESOURCES

Rancho Los Cerritos provides an interesting and rare link to California's past. There are very few remaining sites within California that provide a glimpse into life in California during the

Rancho period of the state. Rancho Los Cerritos provides visitors to the site the opportunity to explore the adobe abode, courtyard, surrounding grounds and museum to learn about this period in California history. Preservation of the unique cultural resources is essential to preserve one of the few remaining physical links to California's past.

The site at Rancho Los Cerritos is also expected to contain many latent archeological artifacts. In earlier excavations at the site, various artifacts dating back to the 1840's were discovered. Development of the proposed project could have a significant impact on this resource.

The Draft Environmental Impact Report should address potential impacts to both cultural and archeological resources from development of the proposed project.

VI. GEOLOGY AND SOILS

No Faults are known to underlie the site, nor is the site in a designated tsunami influence area. Based on the *Seismic Element*, the liquefaction potential is considered low. However due to the use of adobe and lack of foundation the abode is susceptible to the increased risk of structural failure in a seismic event. The proposed project will seismically retrofit the adobe abode to help reduce the risk of structural failure during a seismic event.

The Draft Environmental Impact Report should address the seismic risk associated with the site and the proposed project.

VII. HAZARDS AND HAZARDOUS MATERIALS

The project site is not known to store or contain hazardous materials that would pose a threat to the health and safety of individuals on the site, or those within the vicinity of the project. The project site is not located within two miles of a public or private airport, and while large trees and other vegetation surround the site, the project site is not located within an area subject to wildland fires.

VIII. HYDROLOGY AND WATER QUALITY

The project site is not located within a flood zone as designated by the Flood Insurance Rate Map July 6, 1998. Development of the proposed project will include the development of new structures to facilitate the long term objectives and goals of Rancho Los Cerritos. These structures will have a marginal effect on the site's ability to absorb water over that which currently exist. This marginal reduction in water absorption is not anticipated to substantially increase the volume or quality of water runoff from the site.

IX. LAND USE AND PLANNING

Rancho Los Cerritos as discussed supra has been an established part of the community since 1844. The zoning for the proposed project site is Institutional (I). The implementation of the Master Plan for the Rancho is in conformity with the zoning code for the site. However, adjacent land uses to the proposed project site are zoned as Single Family Residential Large Lots, (R-1-L)

zone, which is considered a sensitive land use. Development of the proposed project could impact this land use.

Development of the proposed project will also reduce the current level of parking spaces available at the site. The reduced number of parking spaces available at the site may be inadequate to provided the required number of parking spaces needed to accommodate the proposed project site.

The Draft Environmental Impact Report should address the impact of the proposed project to adjacent land uses created from development of the proposed project and the potential issue inadequate parking.

X. MINERAL RESOURCES

Petroleum has played a significant role in the early development of the City of Long Beach. There were many oil extraction operations along the Los Angeles River, along the shoreline and throughout the city. Oil extraction operations have diminished considerably through the years as this resource has been depleted and the costs of further extraction have made in it economically impractical.

Rancho Los Cerritos was operating as a rancho prior to the discovery and extraction of oil from the area. Many of the lands once used for oil extraction operations once were part of the rancho. Development of the Master Plan and the proposed improvements to Rancho Los Cerritos will have no effect on any on going or future oil extraction operations.

There are no other known mineral resources that will be impacted by the proposed project. Therefore, unless other comments relating to this resource are received no further analysis will be discussed.

XI. NOISE

Implementation of the Master Plan for Rancho Los Cerritos and development of the proposed improvements are expected to generate an increase in visitors to the site. This expected increase is anticipated to increase the ambient noise levels during the Rancho's operating hours. In addition special events at the Rancho will also increase the ambient noise level during the event.

The anticipated increase in ambient noise levels generated by the site will be discussed further in the Draft Environmental Impact Report.

XII. POPULATION AND HOUSING

Development of the proposed project and implementation of the Master Plan for Rancho Los Cerritos is expected to increase the number of visitor to the site. However, the increase in visitation to the Rancho is not expected to translate into an increase in demand for housing in the City of Long Beach or surrounding communities. In addition, the level of employment at the

Rancho is relatively small and not anticipated to have a significant impact on housing stocks.

XIII. PUBLIC SERVICES

Fire protection is provided by the Long Beach Fire Department, which has 23 in-city stations. The Department is divided into Fire Prevention, Fire Suppression, Bureau of Instruction, and the Bureau of Technical Services. The Fire Department is accountable for medical, paramedic, and other first aid rescue calls from the community. The project area is principally served by Fire Station No. 9, which is located at 3917 Long Beach Boulevard. However, any fire unit in the system may respond to the project location depending upon availability.

The Long Beach Police Department serves the project site. The Department is divided into Patrol, Traffic, Detective, Juvenile, Vice, Community, Jail, Records, and Administration Sections. The City has four Patrol Divisions; East, West, North and South. The North Division services the project area.

The City of Long Beach is primarily served by the Long Beach Unified School District, which also serves the Cities of Signal Hill, and most of Lakewood. The District has been operating at or over capacity. The State Legislature has determined that developer fees may be assessed to pay for new facilities needed and mitigate the impact of new development.

General maintenance of infrastructure is currently a municipal service.

All public services are adequate to meet the demand placed on them by the proposed project, and continue to meet the needs of the rest of the community. This resource will not be discussed in the Draft Environmental Impact Report unless information is received to warrant further discussion.

XIV. RECREATION

Responsibility for management of Rancho Los Cerritos is maintained within the City of Long Beach Department of Parks, Recreation and Marine. Development of the Master Plan and the proposed project for Rancho Los Cerritos will improve the both the recreational and education quality of the Rancho. By improving visitor accommodations and restoring portions of the Rancho the City would be preserving an important aspect of the City's history and expanding the opportunity for visitor enjoyment of this facility.

This resource will not be discussed further in the Draft Environmental Impact Report unless comments received warrant further discussion.

XV. TRANSPORTATION

Development of the proposed project and implementation of the Master Plan for Rancho Los Cerritos is expected to generate additional traffic levels over those that currently exist. Access to the site is obtained by traveling on two predominately residential streets. The street leading to

the site, Virginia Road, is lined by well-maintained estate type homes. Development of the proposed project could increase the traffic volume using these residential streets. In addition, limited parking within the site may require vehicles to park on the street out side the Rancho. The Draft Environmental Impact Report should address the impact of this resource.

XVI. UTILITIES AND SERVICE SYSTEMS

Development of the proposed project and implementation of the Master Plan at Rancho Los Cerritos, is not expected to significantly increase the demand for utilities and services over that which currently exist.

Present drainage capacity is expected to be adequate to accommodate project demands, and no new treatment facilities would be required for development of the proposed project. While the Rancho will construct new structures on site, additional water runoff is expected to be marginal due to the size of the structures and the sites soil capacity to absorb water.

The City's Water Department supplies water to the City of Long Beach. Local groundwater and imported water make up the Long Beach water supply. About 46 percent of the water comes from the Department's 25 active wells. About 54 percent is treated water purchased from the Metropolitan Water District of Southern California (MWD).The proposed project will have no significant impact on the City's water system. While it is anticipated that the site will attract more visitors marginally increasing water demand, the primary use of water, landscaping needs, will remain largely unaltered.

Solid waste generated in the City of Long Beach is collected by the City's Integrated Resources Bureau -Refuse Collection Division, or by a private waste-removal company licensed by the City. The City has an Integrated Waste Management Program that encourages waste reduction, recycling and recovery efforts. It is the City's policy to support a hierarchy of waste management preferences that give priority to source reduction, materials reuse and recycling in order to minimize the amount of waste to be managed. Refuse that is collected by the City is taken to the South East Resource Recoveries Facility (SERRF), a publicly owned solid waste management facility that uses mass burn technology. Private waste removal companies either uses the SERRF, or a refuse transfer station.

The Proposed Site will have and a temporary increase in solid refuge due to excess building materials during the construction of the building on site. In addition, increased visitation to the site will also generate additional refuge. However the increase in refuge will have no significantly impact on the waste disposal capabilities of the city.

Unless further comments are received regarding this resource that warrant additional comment and analysis, this resource will not be discussed in the Draft Environmental Impact Report.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE

Implementation of the Master Plan and development of the proposed project for Rancho Los Cerritos is not anticipated significant effect either individually or cumulatively on the

environment. While the proposed project will include new construction, renovation and an increase in the amount of visitors, these activities are substantially the same as the current setting. The Ranch project poses no significant risk to any habitat for fish or wildlife and the riparian nature of the site will remain largely unaltered.

A general analysis and statement regarding the over all impact of the project will be made in the Draft Environmental Impact Report.

CITY OF LONG BEACH

ORIGINAL FILED

DEPARTMENT OF PLANNING AND BUILDING

SEP 22 1999

333 W. Ocean Boulevard, 5th Floor • Long Beach, CA 90802 • (562) 570-6894 FAX (562) 570-6068

COMMUNITY AND ENVIRONMENTAL PLANNING DIVISION

LOS ANGELES, COUNTY CLERK

NOTICE OF PREPARATION

TO:

FROM: Robert Wise
Environmental Planner
City of Long Beach
333 W. Ocean Blvd.
Long Beach, CA 90802

SUBJECT: Notice of Preparation of a Draft Environmental Impact Report

The City of Long Beach Planning Commission will be the Lead Agency and will prepare an environmental impact report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the probable environmental effects are contained in the attached materials. A copy of the Initial Study X is, ____ is not, attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice.

Please send your response to Robert Wise at the address shown above. We will need the name for a contact person in your agency.

Project Title: Rancho Los Cerritos

Project Location: 4600 Virginia Road Long Beach (City) Los Angeles (County)

Project Description: The Rancho's on the National Register. The proposal consists of demolishing the patio, parking lot and restrooms and constructing a visitor center, barn complex, caretakers house and new restrooms.

Date: 8/27/99 Signature:

Robert Wise
Environmental Planner
(562) 570-5081

99148658

Reference: California Administrative Code, Title 14, Sections 15082(a), 15103, 15357

INITIAL STUDY

1. **Project title:**
Rancho Los Cerritos

2. **Lead agency name and address:**
City of Long Beach Planning Commission
333 W. Ocean Boulevard
Long Beach, CA 91711

3. **Contact person and phone number:**
Robert A. Wise
Environmental Planning
333 West Ocean Boulevard, 5th Floor
Long Beach, CA
(562) 570-5081

4. **Project location:**
4600 Virginia Road
Long Beach, CA 90807

5. **Project sponsor's name and address:**
Dennis Eschen
2670 Studebaker Rd.
Long Beach, CA 90807

6. **General plan designation:**
LUD-11

7. **Zoning:**
Institutional (I)

8. **Description of project:**

Rancho Los Cerritos is a National, State and Local Historical Landmark owned and operated by the City of Long Beach since 1955 as a public museum and historic site. Built in 1844, the two story adobe abode and landscaped grounds echo with the rich history of the Spanish, Mexican and American California, and the families who helped transform Southern California from its ranching beginning to a modern, urban society. In the late 19th century, the 27,000-acre cattle and sheep pastures of the Rancho began to decrease as the cities of Long Beach, Lakewood, Bellflower, Paramount, and Signal Hill began to develop and attract an increasing population. Today the Rancho is open for public tours and offers garden activities, lectures, workshops, family events and school trips. The Rancho has an active volunteer program and a California History Research Library.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

	Aesthetics		Agriculture Resources		Air Quality
	Biological Resources	√	Cultural Resources		Geology /Soils
	Hazards & Hazardous Materials		Hydrology / Water Quality	√	Land Use / Planning
	Mineral Resources	√	Noise		Population / Housing
	Public Services		Recreation	√	Transportation/Traffic
	Utilities / Service Systems		Mandatory Findings of Significance		

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. ____

I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared. ____

I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. √

I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. ____

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required. ____

Signature

6/16/99
Date

Robert A. Wise
Printed Name

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No impact
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?				√
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			√	
c) Substantially degrade the existing visual character or quality of the site and its surroundings?				√
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				√
II. AGRICULTURE RESOURCES -- In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				√
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				√
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				√
III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable Air Quality Attainment Plan?				√
b) Violate any air quality standard or contribute to an existing or projected air quality violation?				√

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				√
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?				√
V. CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	√			
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	√			
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	√			
d) Disturb any human remains, including those interred outside of formal cemeteries?				√
VI. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				√
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			√	
ii) Strong seismic ground shaking?			√	

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No impact
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				√
9) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				√
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				√
VIII. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?				√
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				√
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			√	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				√
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				√
f) Otherwise substantially degrade water quality?				√

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No impact
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				√
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		√		
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				√
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				√
XII. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				√
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				√
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				√
XIII. PUBLIC SERVICES -- Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?				√
b) Police protection?				√
c) Schools?				√

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No impact
d) Parks?				√
e) Other public facilities?				√
XIV. RECREATION --				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				√
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				√
XV. TRANSPORTATION/TRAFFIC -- Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	√			
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				√
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				√
d) Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				√
e) Result in inadequate emergency access?		√		
f) Result in inadequate parking capacity?	√			
9) Conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				√

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No impact
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				√
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				√

I. AESTHETICS

Rancho Los Cerritos is a unique historical site within the City of Long Beach. It is on the National Register and provides a physical link to California's past. Any development or renovation to the Rancho could, if improperly performed, have a significant impact to the historical value of the site. While most of the discussion regarding the impact to the historical value of the Rancho will be discussed under Cultural Resources in the Draft Environmental Impact Report, the report should also address any potential impacts to the aesthetic importance of Rancho Los Cerritos.

II. AGRICULTURAL RESOURCES

Rancho Los Cerritos consists of 4.74 acres of land and is bordered by the Virginia Country Club on two sides, and single family residential on the other two sides. The City of Long Beach has developed around the Rancho and is highly urbanized.

Development of the proposed project will not result in any significant impact to agricultural resources as defined in the California Agricultural Land Evaluation and Site Model (1997) prepared by the California Department of Conservation. The proposed project is not located on farmland or within an agricultural zone.

Therefore unless further investigation or comments warrant further evaluation of this resource, this resource will not be discussed further.

III. AIR QUALITY

The air quality in the project area is generally good and influenced by the marine wind pattern. The Draft Environmental Impact Report should evaluate potential air pollutant emissions resulting from the increased vehicle trips to Rancho Los Cerritos.

IV. BIOLOGICAL

The adobe abode and surrounding land of Rancho Los Cerritos was established in 1844 and once encompassed 27,000 acres. As cities began to develop, the area of rangeland of the Rancho continued to decrease along with native plant and animal life. Today the Rancho consists of 4.72 acres with no animal of plant life identified as endangered or threatened by the California Department of Fish and Game on the site.

There are many trees at Rancho Los Cerritos that may be considered to be of historical significance. Among these tree are those planted during the Temple Family period (1844-1866), the early Bixby Family period (1866-1930) and the Bixby / Cornell Family period (1930-1954). The Draft Environmental Impact Report should address the proposed project impact to these trees.

increase the volume or quality of water runoff from the site.

Unless comments received necessitate further evaluation of this issue, this subject will not be discussed further.

IX. LAND USE AND PLANNING

Rancho Los Cerritos as discussed supra has been an established part of the community since 1844. The zoning for the proposed project site is Institutional (I). The implementation of the Master Plan for the Rancho is in conformity with the zoning code for the site. However, adjacent land uses to the proposed project site are zoned as Single Family Residential Large Lots, (R-1-L) zone, which is considered a sensitive land use. Development of the proposed project could impact this land use.

Development of the proposed project will also reduce the current level of parking spaces available at the site. The reduced number of parking spaces available at the site may be inadequate to provided the required number of parking spaces needed to accommodate the proposed project site.

The Draft Environmental Impact Report should address the impact of the proposed project to adjacent land uses created from development of the proposed project and the potential issue inadequate parking.

X. MINERAL RESOURCES

Petroleum has played a significant role in the early development of the City of Long Beach. There were many oil extraction operations along the Los Angeles River, along the shoreline and throughout the city. Oil extraction operations have diminished considerably through the years as this resource has been depleted and the costs of further extraction have made in it economically impractical.

Rancho Los Cerritos was operating as a rancho prior to the discovery and extraction of oil from the area. Many of the lands once used for oil extraction operations once were part of the rancho. Development of the Master Plan and the proposed improvements to Rancho Los Cerritos will have no effect on any on going or future oil extraction operations.

There are no other known mineral resources that will be impacted by the proposed project. Therefore, unless other comments relating to this resource are received no further analysis will be discussed.

XI. NOISE

Implementation of the Master Plan for Rancho Los Cerritos and development of the proposed improvements are expected to generate an increase in visitors to the site. This expected increase

Responsibility for management of Rancho Los Cerritos is maintained within the City of Long Beach Department of Parks, Recreation and Marine. Development of the Master Plan and the proposed project for Rancho Los Cerritos will improve the both the recreational and education quality of the Rancho. By improving visitor accommodations and restoring portions of the Rancho the City would be preserving an important aspect of the City's history and expanding the opportunity for visitor enjoyment of this facility.

This resource will not be discussed further in the Draft Environmental Impact Report unless comments received warrant further discussion.

XV. TRANSPORTATION

Development of the proposed project and implementation of the Master Plan for Rancho Los Cerritos is expected to generate additional traffic levels over those that currently exist. Access to the site is obtained by traveling on two predominately residential streets. The street leading to the site, Virginia Road, is lined by well-maintained estate type homes. Development of the proposed project could increase the traffic volume using these residential streets. In addition, limited parking within the site may require vehicles to park on the street out side the Rancho. The Draft Environmental Impact Report should address the impact of this resource.

XVI. UTILITIES AND SERVICE SYSTEMS

Development of the proposed project and implementation of the Master Plan at Rancho Los Cerritos, is not expected to significantly increase the demand for utilities and services over that which currently exist.

Present drainage capacity is expected to be adequate to accommodate project demands, and no new treatment facilities would be required for development of the proposed project. While the Rancho will construct new structures on site, additional water runoff is expected to be marginal due to the size of the structures and the sites soil capacity to absorb water.

The City's Water Department supplies water to the City of Long Beach. Local groundwater and imported water make up the Long Beach water supply. About 46 percent of the water comes from the Department's 25 active wells. About 54 percent is treated water purchased from the Metropolitan Water District of Southern California (MWD).The proposed project will have no significant impact on the City's water system. While it is anticipated that the site will attract more visitors marginally increasing water demand, the primary use of water, landscaping needs, will remain largely unaltered.

Solid waste generated in the City of Long Beach is collected by the City's Integrated Resources Bureau -Refuse Collection Division, or by a private waste-removal company licensed by the City. The City has an Integrated Waste Management Program that encourages waste reduction, recycling and recovery efforts. It is the City's policy to support a hierarchy of waste management preferences that give priority to source reduction, materials reuse and recycling in order to minimize the amount of waste to be managed. Refuse that is collected by the City is

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse

Gray Davis
GOVERNOR

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MAILING ADDRESS: P.O. BOX 3044 SACRAMENTO, CA 95812-3044
916-445-0613 FAX 916-323-3018 www.opr.ca.gov/clearinghouse.html

Loretta Lynch
DIRECTOR

Notice of Preparation

September 15, 1999

COMMENTS TO NOP

To: Reviewing Agencies

Re: Rancho Los Cerritos
SCH# 99091075

Attached for your review and comment is the Notice of Preparation (NOP) for the Rancho Los Cerritos draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Gerhardt H. Felgemaker
Long Beach Planning division
333 W. Ocean Blvd.
5th Floor
Long Beach, CA 90802

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

TR for MB
Mosie Boyd
State Clearinghouse

Attachments
cc: Lead Agency

NOP Distribution List

SCH # 99091075

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South Coast
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21865 E. Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 • http://www.aqmd.gov

September 22, 1999

Mr. Robert Wise
Environmental Planner
City of Long Beach
333 W. Ocean Boulevard
Long Beach, CA 90802

Dear Mr. Wise:

Notice of Preparation of an Environmental Impact Report
Rancho Los Cerritos

The South Coast Air Quality Management District (AQMD) appreciates the opportunity to comment on the above-mentioned document. The AQMD's comments are recommendations regarding the analysis of potential air quality impacts from the proposed project that should be included in the Draft Environmental Impact Report (EIR).

Air Quality Analysis

The AQMD adopted its California Environmental Quality Act (CEQA) Air Quality Handbook in 1993 to assist other public agencies with the preparation of air quality analyses. The AQMD recommends that the Lead Agency use this Handbook as guidance when preparing its air quality analysis. Copies of the Handbook are available from the AQMD's Subscription Services Department by calling (909) 396-3720.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project. Air quality impacts from both construction and operations should be considered. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, that is, sources that generate or attract vehicular trips should be included in the evaluation. An analysis of all toxic air contaminant impacts due to the decommissioning or use of equipment potentially generating such air pollutants should also be included.

Mitigation Measures

In the event that the project generates significant adverse air quality impacts, CEQA requires that all feasible mitigation measures be utilized during project construction and operation to minimize or eliminate significant adverse air quality impacts. To assist the Lead Agency with identifying possible mitigation measures for the project, please refer to Chapter 11 of the AQMD CEQA Air Quality Handbook for sample air quality mitigation measures. Additionally, AQMD's Rule 403 – Fugitive Dust, and the Implementation Handbook contain numerous measures for controlling construction-related emissions that should be considered for use as CEQA mitigation if not otherwise required. Pursuant to state CEQA Guidelines Section 15126 (c), any impacts resulting from mitigation measures must also be discussed.

Data Sources

AQMD rules and relevant air quality reports and data are available by calling the AQMD's Public Information Center at (909) 396-3600. Much of the information available through the Public Information Center is also available via the AQMD's World Wide Web Homepage (http://www.aqmd.gov).

The AQMD is willing to work with the Lead Agency to ensure that project-related emissions are accurately identified, categorized, and evaluated. Please call Ms. Tara Tisopulos, Air Quality Specialist, CEQA Section, at (909) 396-3102 if you have any questions regarding this letter.

Sincerely,

Steve Smith

Steve Smith, Ph.D.
Program Supervisor, CEQA Section
Planning, Rule Development and Area Sources

SS:TT:li

LAC990915-04LI
Control Number

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

CHARLES W. CARRY
Chief Engineer and General Manager

September 27, 1999

File No: 03-00.04-00

Mr. Robert Wise
City of Long Beach
Department of Planning and Building
333 W. Ocean Boulevard, 5th Floor
Long Beach, CA 90802

Dear Mr. Wise:

Rancho Los Cerritos, 4600 Virginia Road, Long Beach

The County Sanitation Districts of Los Angeles County (Districts) received a Negative Declaration for the subject project on September 13, 1999. The proposed development is located within the jurisdictional boundaries of District No. 3. We offer the following comments regarding sewerage service:

1. The wastewater flow originating from the proposed project will discharge to a local sewer line, which is not maintained by the Districts, for conveyance to the Districts' North Long Beach Trunk Sewer, Section 2, located in Pacific Avenue at 49th Street. This 30-inch diameter trunk sewer has a design capacity of 7.2 million gallons per day (mgd) and conveyed a peak flow of 2.8 mgd when last measured in 1998.

2. The wastewater generated by the proposed project will be treated at the Joint Water Pollution Control Plant (JWPCP) located in the City of Carson. The JWPCP has a design capacity of 385.0 mgd and currently processes an average flow of 330.3 mgd.

3. The expected average wastewater flow from the project site is 2,556 gallons per day.

4. The Districts are empowered by the California Health and Safety Code to charge a fee for the privilege of connecting (directly or indirectly) to the Districts' Sewerage System or **increasing the existing strength and/or quantity of wastewater attributable to a particular parcel or operation already connected**. This connection fee is required to construct an incremental expansion of the Sewerage System to accommodate the proposed project which will mitigate the impact of this project on the present Sewerage System. Payment of a connection fee will be required before a permit to connect to the sewer is issued.

Recycled Paper

5. The design capacities of the Districts' wastewater treatment facilities are based on population forecasts adopted in the Southern California Association of Governments' (SCAG) 1994 Regional Comprehensive Plan and Guide (RCPG). The RCPG is part of the 1994 South Coast Air Quality Management Plan (AQMP). The AQMP and RCPG are jointly prepared by the South Coast Air Quality Management District (SCAQMD) and SCAG as a requirement of the Federal Clean Air Act (CAA). In order to conform with the AQMP, all expansions of Districts' facilities must be sized and service phased in a manner which will be consistent with the Growth Management Element of the RCPG. The Growth Management Element contains a regional growth forecast for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial which was prepared by SCAG. Specific policies included in the RCPG which deal with the management of growth will be incorporated into the AQMP strategies to improve air quality in the South Coast Air Basin. The available capacity of the Districts' treatment facilities will, therefore, be limited to levels associated with approved growth identified in the RCPG. As such, this letter does not constitute a guarantee of wastewater service, but is to advise you that the Districts intend to provide this service up to the levels which are legally permitted and to inform you of the currently existing capacity and any proposed expansion of the Districts' facilities.

If you have any questions, please contact the undersigned at (562) 699-7411, extension 2717.

Very truly yours,

Charles W. Carry

Ruth I. Charles

Ruth I. Charles
Engineering Technician
Planning & Property Management Section

RIC:eg

SOUTHERN CALIFORNIA
ASSOCIATION of GOVERNMENTS

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Riverside County: James Venable, Riverside County • Dick Kelly, Palm Desert • Jan Leja, Beaumont • Ron Loveridge, Riverside • Andrea Puga, Corona • Ron Roberts, Temecula

San Bernardino County: Kathy Davis, San Bernardino County • Bill Alexander, Rancho Cucamonga • Jim Bagley, Twentynine Palms • David Eshleman, Fontana • Lee Ann Garcia, Grand Terrace • Gwenn Norton-Perry, Chino Hills • Ray Rucker, Highland

Ventura County: Judy Mikels, Ventura County • Donna De Paola, San Buenaventura • Andrew Fox, Thousand Oaks • Toni Young, Port Hueneme

Riverside County Transportation Commission: Robin Lowe, Hemet

Ventura County Transportation Commission: Bill Davis, Simi Valley

Printed on Recycled Paper 559-8/24/99

October 4, 1999

Mr. Robert A. Wise
Environmental Planning
City of Long Beach Planning Commission
333 W. Ocean Boulevard
Long Beach, CA 91711

RE: SCAG Clearinghouse I19990442 Rancho Los Cerritos

We have reviewed the above referenced document and determined that it is not regionally significant per Areawide Clearinghouse criteria. Therefore, the project does not warrant clearinghouse comments at this time. Should there be a change in the scope of the project, we would appreciate the opportunity to review and comment at that time.

A description of the project was published in the **October 1, 1999** Intergovernmental Review Report for public review and comment.

The project title and SCAG Clearinghouse number should be used in all correspondence with SCAG concerning this project. Correspondence should be sent to the attention of the Clearinghouse Coordinator. If you have any questions, please contact me at (213) 236-1917.

Sincerely,

J. DAVID STEIN
Manager, Performance Assessment and Implementation

COUNTY OF LOS ANGELES

DEPARTMENT OF PUBLIC WORKS

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (626) 458-5100

HARRY W. STONE, Director

ADDRESS ALL CORRESPONDENCE TO:
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ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE
REFER TO FILE: P-2

October 18, 1999

Mr. Robert A. Wise
City of Long Beach
Planning Commission
333 West Ocean Boulevard, 5th Floor
Long Beach, CA 91711

Dear Mr. Wise:

RESPONSE TO A NOTICE OF PREPARATION (NOP)
RANCHO LOS CERRITOS

Environmental Programs

As projected in the Los Angeles County Countywide Siting Element, which was approved by a majority of the cities in Los Angeles County in late 1997 and by the County Board of Supervisors in January 1998, a shortfall in permitted daily landfill capacity may be experienced in the County within the next few years. The construction and demolition activities and post-development operations associated with the proposed project may increase the generation of solid waste, and may negatively impact solid waste management infrastructure in the County. Therefore, the proposed Environmental Impact Report (EIR) must identify what measures the project proponent may implement to mitigate the impact. Mitigation measures may include, but are not limited to, implementation of waste reduction and recycling programs to divert the solid waste, including construction and demolition waste from the landfills.

The California Solid Waste Reuse and Recycling Access Act of 1991, as amended, requires each "development project" to provide an adequate storage area for collection and removal of recyclable materials. The EIR should include/discuss standards to provide adequate "waste storage areas" for collection/storage of recyclable and green waste materials for this project.

The EIR needs to fully assess the impact of this project on the quality of stormwater runoff. The EIR should reference Order No. 96-054, National Pollutant Discharge Elimination System Permit CAS614001 issued by the California Regional Water Quality Control Board

to the County and local agencies. The EIR should also indicate compliance with all relevant stormwater quality management programs of the Federal, State, County, and local agencies.

North of the proposed project location, along the north perimeter of the Virginia County Club, and flowing to the southwest is Drain No. 181-130 (Bond Issue Project No. 130, Pump District No. 7) which discharges into the Los Angeles River. If any connections are made to this storm drain, a permit is required from this Department's Construction Division.

If you have any questions regarding the above comments, please contact Mr. Alan Nino at (626) 458-3564.

Traffic and Lighting

We recommend the State of California Department of Transportation and the City of Carson review this document for significant impacts/mitigations within their jurisdictions.

If you have any questions, please contact Mr. Scott Angus of our Traffic Studies Section at (626) 458-5959.

If you have any questions regarding the environmental reviewing process of this Department, please contact Mr. Scott Schales at the address on the first page or at (626) 458-4119.

Very truly yours,

HARRY W. STONE
Director of Public Works

For DAVID YAMAHARA
Assistant Deputy Director
Planning Division

YC:dbm
A:\YC271.WPD

STATE OF CALIFORNIA—BUSINESS AND TRANSPORTATION AGENCY GRAY DAVIS, *Governor*

DEPARTMENT OF TRANSPORTATION
DISTRIC7, ADVANCE PLANNING OFFICE 1-10
120 SO. SPRING ST.
LOS ANGELES, CA 90012
(213) 897-3747 ATSS: 8- 647-3747
FAX: (213) 897-6317

October 12, 1999

IGR/CEQA/PR/990962/CP
Rancho Los Cerritos
4600 N. Virginia Road – Long Beach, CA 90807
Vic: LA-710-10.745

Mr. Robert Wise, Environmental Planner
City of Long Beach
333 W. Ocean Blvd.
Long Beach, CA 90802

Dear Mr. Wise:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the project referenced above. The Master Plan for Rancho Los Cerritos is designed to serve as a guide for site development and interpretation, and includes sections on structural and landscape restoration, maintenance, educational programming, visitor amenities, staff accommodations and collection needs. The proposed project includes development of a Visitor Center, Barn Complex, and a Caretaker's House at the Rancho Los Cerritos site.

To assist us in our efforts to evaluate and assess the impacts of the project on the State transportation system, we recommend that a brief traffic study or report that includes the following information be prepared for our review:

a) Projected traffic volumes, trip generations and traffic circulation to build-out.
b) Existing and projected AM and PM peak-hour volumes to build-out.
c) Traffic mitigation, if any to be proposed.
d) Any costs for mitigation including widening, signalization, etc. should be extended to cover Route 710 (Long Beach Freeway).
e) Cumulative affect of this project in conjunction with other development in the area.

If you have any questions regarding this response please reference IGR/CEQA # 990962 and call me at (213) 897-4429 or contact Cheryl Powell, the IGR/CEQA Coordinator for the project at (213) 897-3747.

Sincerely,

STEPHEN J. BUSWELL
IGR/CEQA Program Manager
Transportation Planning Office

COUNTY OF LOS ANGELES
FIRE DEPARTMENT
1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294

(323) 890-4330

P. MICHAEL FREEMAN
FIRE CHIEF
FORESTER & FIRE WARDEN

October 29, 1999

Robert Wise, Environmental Planner
City of Long Beach
333 W. Ocean Boulevard
Long Beach, CA 90802

Dear Mr. Wise:

SUBJECT: NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT -- RANCHO LOS CERRITOS INITIAL STUDY -- CITY OF LONG BEACH (EIR739/1999)

We have reviewed this Initial Study for a Draft Environmental Impact Report for Rancho Los Cerritos Project. This project is located at 4600 Virginia Road, in the City of Long Beach. This project has been reviewed by the Planning, Subdivision and Forestry Divisions of the County of Los Angeles Fire Department. These are the results of their findings:

SERVICE RESPONSIBILITY

The subject property is totally within the City of Long Beach and does not appear to have any impact on the emergency responsibilities of this Department. It is not a part of the emergency response area of the Consolidated Fire Protection District.

The statutory responsibilities of the County of Los Angeles Fire Department Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones or Fire Zone 4, archeological and cultural resources and the County Oak Tree Ordinance. The areas germane to these statutory responsibilities have been addressed.

If you have any additional questions, please contact this office at (323) 890-4330.

Very truly yours,

Michael A. Wilkinson

MICHAEL A. WILKINSON, CHIEF, FORESTRY DIVISION,
PREVENTION BUREAU

MAW:jmb

Report on Archaeology at Rancho Los Cerritos Historic Site in Long Beach

Rancho Los Cerritos Historic Site has been registered as site LAn-696 for both possible historic archaeological associations and evidence of a site component dating back to the period 5,000 to 2,000 BC.

Secretary of the Interior's Standards for Historic Preservation Projects

Rancho Los Cerritos is a National, State and Long Beach Historic Landmark, and is listed on the National Register of Historic Places. As such, all work is guided by the Secretary of the Interior's Standards for Historic Preservation Projects. The standards include the following recommendations regarding archaeological sites and features:

Recommended:

- Retain archaeological resources intact, wherever possible
- Minimize disturbance of terrain around the property, thus reducing the possibility of destroying unknown archaeological resources
- Undertake archaeological investigations in accordance with The Recovery of Scientific, Prehistoric, and Archaeological Data: Methods, Standards, and Reporting Requirements

The Standards do not forbid ground disturbance. Instead, they provide guidelines should disturbance be necessary when performing restoration, rehabilitation or reconstruction work on a historic property.

Per the guidelines, we are required to:

- Evaluate the archaeological potential of an area if we will disturb the ground
- Properly monitor all ground disturbances on the property for possible archaeological data that could provide information relating to the history or interpretation of the property

A copy of relevant pages from The Secretary of the Interior's Standards is attached.

Potential Impact of Master Plan Construction on Archaeological Resources

In developing the master plan, in June 1998 the City and consultant team invited the State Historic Preservation Officer [SHPO] to review proposals for reconstructed buildings in accordance with the Secretary of the Interior's Standards. Then-SHPO Cherilyn Widell supported the overall master plan concepts. For the record, she noted that we should professionally excavate the area to ascertain if there is evidence of remaining foundations prior to construction of the new barn complex. It was agreed amongst all parties that all new buildings would be constructed in accordance with the Secretary

of the Interior's Standards for Reconstruction. At the time of construction, a professional archaeology firm with a historic archaeology emphasis will be hired to investigate the construction sites for both the Visitor Center and barn complex, and to monitor excavation for footings and basements.

The State Historic Preservation Officer, Long Beach Neighborhood and Historic Preservation Officer, and Long Beach Cultural Heritage Commissioners have worked with Rancho staff and our master plan consultant team in the development and review of the master plan. Before any new work is undertaken, the State Office of Historic Preservation and the Long Beach Cultural Heritage Commission will also review and approve all detailed construction plans to ensure compliance with the Standards.

Past Archaeological Work

Formal digs have taken place at Rancho Los Cerritos in 1987 as part of the Historic Structure Report, and in 1997 as part of the west wall reconstruction. The first dig was by Greenwood & Associates; RMW conducted the second dig. Detailed reports are available on each.

Other informal archaeological digs have been conducted on Rancho Los Cerritos grounds since the late 1950s. Two areas have been mapped as especially rich in historical archaeological materials. The area west of the ranch house, under the planted island, contains a circa 1850s trash pit. The area by the incinerator, north of the kitchen area, is rich in 1870s materials. Both areas will be impacted by master plan construction and will require mitigation in the form of professional archaeological investigation, as indicated above.

Other Mitigation Efforts

Rancho staff can monitor work on or immediately adjacent to the 1844 adobe. Two previous professional digs did not reveal significant findings that would automatically warrant further archaeological studies within the structure. The inner courtyard, west parking lot, picnic area and current restroom location were also severely disturbed by construction during the 1930 remodel and additions by the City of Long Beach between 1955 and 1985. These prior disturbances undermine the value of archaeological materials since the materials will not be in their original locations; however, the areas should still be monitored during construction. As allowed under the Secretary of the Interior's Standards, Rancho staff can and will monitor disturbances in these areas and a professional archaeological team will be called in should there be a significant finding.

Summary of Mitigation Plans

The proposed locations for the Cota Adobe (new Visitor Center) and barn complex are potentially rich in undisturbed archaeological artifacts and, per the Secretary of the Interior's Standards for Historic Preservation Projects,

will be professionally investigated prior to construction. Demolition work in previously disturbed areas that is required to remove the City-added patios, restrooms and west parking lot will be monitored by Rancho staff. Should significant materials be uncovered, Rancho staff will request a halt in construction until the area can be investigated by a professional archaeology firm.

Ellen Calomiris
June 1999

THE SECRETARY OF THE INTERIOR'S STANDARDS FOR HISTORIC PRESERVATION PROJECTS

The Secretary of the Interior has the responsibility to develop standards for all programs under his authority that affect cultural resources listed or eligible for listing in the National Register of Historic Places. In fulfillment of this responsibility:

THE SECRETARY OF THE INTERIOR'S STANDARDS FOR HISTORIC PRESERVATION PROJECTS have been developed for use by the National Park Service and the State Historic Preservation Officers and their staffs in planning, undertaking, and supervising Historic Preservation Fund grant-assisted projects for properties listed in the National Register.

THE SECRETARY OF THE INTERIOR'S STANDARDS FOR HISTORIC PRESERVATION PROJECTS are also used by the National Park Service when advising other Federal agencies under Executive Order 11593, and reviewing rehabilitation proposals submitted with State and local government applications for the transfer of federally-owned surplus properties listed in the National Register.

The Standards for Rehabilitation, which comprise one section of THE SECRETARY OF THE INTERIOR'S STANDARDS FOR HISTORIC PRESERVATION PROJECTS, are used by the National Park Service and the State Historic Preservation Officers and their staffs when determining if a rehabilitation for a "certified historic structure" qualifies as a certified rehabilitation pursuant to the Economic Recovery Tax Act of 1981, as amended. It should be noted that although the rehabilitation standards are included in this publication, the rehabilitation guidelines are not. This is because a separate, book-length, publication of the National Park Service entitled "The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings" (revised 1983) addresses the subject in full.

The Secretary of the Interior's
STANDARDS for HISTORIC PRESERVATION PROJECTS

DEFINITIONS

The following definitions are provided for treatments that may be undertaken on historic properties listed in the National Register of Historic Places:

Acquisition

Is defined as the act or process of acquiring fee title or interest other than fee title of real property (including the acquisition of development rights or remainder interest).

Protection

Is defined as the act or process of applying measures designed to affect the physical condition of a property by defending or guarding it from deterioration, loss or attack, or to cover or shield the property from danger or injury. In the case of buildings and structures, such treatment is generally of a temporary nature and anticipates future historic preservation treatment; in the case of archeological sites, the protective measure may be temporary or permanent.

Stabilization

Is defined as the act or process of applying measures designed to reestablish a weather resistant enclosure and the structural stability of an unsafe or deteriorated property while maintaining the essential form as it exists at present.

DEFINITIONS - Continued

Preservation

Is defined as the act or process of applying measures to sustain the existing form, integrity, and material of a building or structure, and the existing form and vegetative cover of a site. It may include initial stabilization work, where necessary, as well as ongoing maintenance of the historic building materials.

Rehabilitation

Is defined as the act or process of returning a property to a state of utility through repair or alteration which makes possible an efficient contemporary use while preserving those portions or features of the property which are significant to its historical, architectural, and cultural values.

Restoration

Is defined as the act or process of accurately recovering the form and details of a property and its setting as it appeared at a particular period of time by means of the removal of later work or by the replacement of missing earlier work.

Reconstruction

Is defined as the act or process of reproducing by new construction the exact form and detail of a vanished building, structure, or object, or a part thereof, as it appeared at a specific period of time.

Guidelines for Applying
The Secretary of the Interior's
Standards for RECONSTRUCTION

THE ENVIRONMENT

Recommended	*Not Recommended*
Retaining landscape features such as parks, gardens, street lights, signs, benches, walkways, streets, alleys, and building set-backs which have traditionally linked buildings to their environment.	

ARCHEOLOGICAL SITES AND FEATURES

Recommended	*Not Recommended*
Retaining archeological resources intact, whenever possible.	Causing ground disturbances without evaluating the archeological potential of an area.
	Failing to properly monitor all ground disturbances on a property for possible archeological data that could provide information relating to the history of the property.
Minimizing disturbance of terrain around the structure, thus reducing the possibility of destroying unknown archeological resources.	Introducing heavy machinery or equipment into areas where their presence may disturb archeological resources.
	Installing underground utilities, pavements, and other modern features that disturb archeological resources.
Undertaking archeological investigations in accordance with the Recovery of Scientific, Prehistoric,	Undertaking an archeological investigation without professional

ARCHEOLOGICAL SITES AND FEATURES -- continued

Recommended	*Not Recommended*
and Archeological Data: Methods, Standards, and Reporting Requirements (36 CFR 66 Proposed Guidelines published in the Federal Register, Vol. 42, No. 19, Friday, January 28, 1977).	guidance, or without utilizing professional curatorial techniques.

BUILDING SITE

Recommended	*Not Recommended*
Identifying plants, trees, fencings, walkways, outbuildings, and other elements that might be an important part of the property's history and development.	
Retaining plants, trees, fencings, walkways, street lights, utility poles, signs, and benches that reflect the property's history and development.	Making changes to the appearance of the site by removing old plants, trees, fencings, walkways, outbuildings, and other elements before evaluating their importance in the property's history and development.
Basing decisions for reconstructing the site on actual knowledge of the past appearance of the property found in photographs, drawings, newspapers, and tax records.	Giving the site an appearance it never had.
Providing proper site and roof drainage to assure that water does not splash against building or foundation walls, nor drain toward the building.	

PLAN

Recommended	*Not Recommended*
Reproducing the basic plan of a a building, the relationship and size of rooms, corridors, and other spaces.	Altering the basic plan of a building by failing to reconstruct principal walls, partitions, and stairways.

HISTORIC STRUCTURE REPORT

ARCHAEOLOGICAL INVESTIGATION OF LOS CERRITOS ADOBE

Prepared for:
City of Long Beach

Roberta S. Greenwood
and
John M. Foster

October 1987

GREENWOOD AND ASSOCIATES
725 JACON WAY
PACIFIC PALISADES, CALIFORNIA 90272

APPENDIX E

1. INTRODUCTION

Scope of Services

The archaeological investigation at Los Cerritos Adobe was undertaken to provide data relevant to the preparation of an Historic Structure Report and to the planning of future preservation/restoration/interpretive efforts by the City of Long Beach. In addition to contributing construction details for the architectural analysis, the research was further charged with revealing and analyzing data from selected portions of the building site to address these primary questions:

1. Can original architectural features be revealed archaeologically ?

2. Can artifact or feature patterns reveal functional divisions of the interior space ?

3. Does the demonstrated or potential significance of the resources confirm the eligibility of the structure to the National Register of Historic Places ?

As part of project planning, the archaeologists met on site with the architectural consultants to evaluate the existing fabric and determine the optimum locations for subsurface testing to recover information useful to the report objectives. Existing historical data and photographs were reviewed, and a set of questions developed to test assumptions regarding the techniques and methods of construction. The archaeological field work was explicitly limited to three units, all to be placed within the existing walls of the structure.

Theoretical Background

The archaeological field work was designed to provide information needed by the architectural consultants and the City, primarily the methods and techniques of construction and integrity of the adobe interior. Excavation was designed to permit examination of the foundations of all three wings and to test for floors, with the additional hope that there would be other cultural materials associated with the purely structural elements to provide greater insight into chronology and culture than the stones and bricks alone.

Expectations regarding the building and artifacts or ecofacts which would be associated with a secular structure built in the 1840s were based in part upon the results of comparable studies at other southern California adobes which have been excavated, notably the Bandini-Cota Adobe, built in the same decade (Greenwood, Frierman, and Foster 1983), or the Ontiveros Adobe which was slightly earlier but - like the Los Cerritos rancho - supported by a livestock economy (Frierman 1982). Traits which would be typical of the ascribed age of Los Cerritos Adobe include massive stone foundations, reflecting Mission construction techniques and, possibly, the use of neophyte Indian labor; lack of an indoor fireplace or chimney; an outdoor cooking area (ramada and horno); few entrances or windows; siting on bare ground on a slight elevation; and the application of lime plaster over a scratch mud coat on the walls. Glazing was rare in California at this time, and windows of the 1840s might simply have been barred.

Previous Investigations

Excavations have been done in the past at the two-story residence, since at least 1957 (Evans 1969:72). Rancho Los Cerritos was recorded as an archaeological site by William S. Evans, Jr., in 1974, and both the prehistoric and historical

components were designated as CA-LAN-696. Excavations were carried out by field schools on the grounds north and west of the structure over a period of many years. No comprehensive reports have been prepared, and the cultural materials are not now accessible for reference. Preliminary studies addressing portions of the total assemblage include limited examination of a small sample of the cattle bone (Evans et al. 1970), summary notes on Indian-made pottery (Evans 1969), description of the buttons (LeVine 1975:59-74), and passing mention of selected ceramics in the report of a different site (Chace 1969). Additional historical materials listed on the site record include glass, ceramics, metal objects, and clay smoking pipes. A wrought metal hasp is described in Evans 1964. One of the features sampled was interpreted as an adobe borrow pit utilized during the construction and subsequently filled with trash; the deposits are described as stratified (Evans, personal communication 1987).

A chance discovery of unusual interest and potential significance was the finding of four smooth stone disks and seven cogstones in 1930, some 2.5 feet (0.76 m) below the current surface, during trenching for plumbing or furnace installation. There is confusion about the precise location of the cache; review of the contemporary accounts suggested that the materials came from an area either in the courtyard or beneath the floor in one of the adjacent rooms (Dixon 1975). Other prehistoric artifacts noted on the site record include manos, stone scrapers and knives, and two additional cogstones were recovered during Evans' excavations outside the courtyard (Ibid.:27). There is no specific identification of the locality, but Paul Schumacher is known to have spent several weeks "exhuming remains from Indian mounds on the Cerritos rancho" in 1878 (Dixon 1974:27). The prehistoric component has been correlated with the ethnographic Gabrielino village of Tibahang-na, although occupation may have begun much earlier since cogstones have usually been associated with cultures dating as early as 5000-2000 B. C.

Organization of the Project

The excavations were conducted on March 2-4, 1987. Personnel in the field were Roberta S. Greenwood, principal investigator; John M. Foster, field director; and Gwendolyn R. Romani, A. George Toren, Steven Wakefield, June Wishner, and Donna McDevitt, archaeological assistants.

Surveying and cartography were accomplished by Foster, and all laboratory and analytical procedures by Greenwood. In the preparation of this report, the field work is described by Foster, and the artifacts analyzed by Greenwood. The results are interpreted by both authors.

2. DESCRIPTION OF THE FIELD WORK

Field Strategy

A combination of methods and techniques was utilized to achieve the objectives of this investigation. The selection of those areas to be tested was based primarily on the architect's need to examine the nature of the building's foundation and the intersections between exterior and interior partition walls. Potential unit locations were reviewed against plans and reconstruction drawings to rule out, as much as possible, areas disturbed by utilities or other modifications in the past. Sweeps with a metal detector were conducted systematically to search for subsurface concentrations which might indicate either pipes or artifact deposits. After three locations were selected as likely to be undisturbed and containing the desired information, the architect supervised the cutting away of five-foot squares in the cement flooring to expose the surfaces for the investigation. Three controlled units, one in each of the three wings, were then excavated by hand tools with total screening, processing, and laboratory analysis to recover artifactual and faunal materials, examine stratigraphic profiles, and define structural remains.

Excavation Units

Three controlled units were excavated, with all soil screened through 1/4 in mesh. The dimensions were: Unit 1 - 1 x 1 m; Unit 2 - 1 x 1.4 m; and Unit 3 - 1.4 x 0.6 m. The difference in unit size reflects the constraints of the building and the project objectives. They were dug in arbitrary 10 and 20 cm increments, depending on their location, except where there was justification for stratigraphic levels. The initial level for the units was 10 cm where floors and other possible features would most likely be encountered. The lower levels were generally 20 cm due to the paucity of recovered materials. The locations are indicated on Figure 1, and other pertinent data presented in Table 2.1.

Table 2.1. Unit Details

Unit No.	Location	Area m^2	Max. Depth	Volume m^3
1	south wing	1.00		1.10
2	east wing	1.30		0.39
3	north wing	0.96		0.96
Total		3.26		2.45

The purposes, and thus the placements, of the excavation units were related to the adobe. Their distribution was conditioned by the desire to maximize the data recovered during a limited test program, the need to examine different locations within the structure while not affecting its stability, and to conduct the study with minimum disturbance to the staff and visiting public.

Laboratory Methods

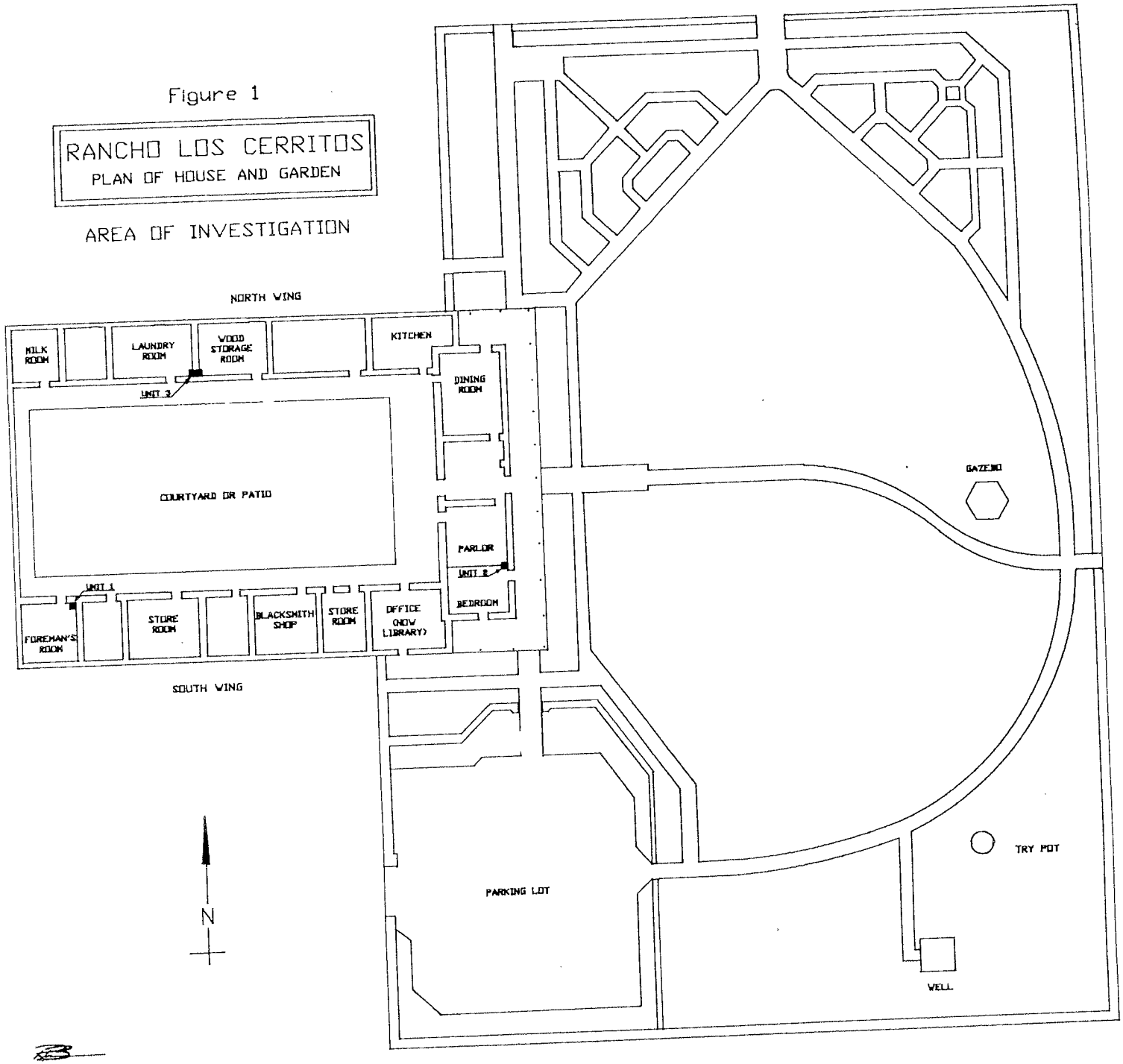
All earth was screened through 1/4 in mesh on the assumption that no material significant to the architectural objectives of this test would be lost through this size. All residue in the screens was bagged, labeled, and returned to the laboratory for washing and sorting. Analysis is based upon a functional classification, e.g., subsistence remains, table ceramics, building materials, etc.

All shell has been identified, weighed, and discarded, but all animal bone has been retained for future analysis. Samples of wood, plaster, mortar, brick, and tile were provided to the architectural consultant, and examples saved. All ceramics and nails have been catalogued and retained; the fasteners from the same level of a single excavation unit are batched under one catalogue number. Amorphous metal beyond any hope of identification has been weighed, recorded, and discarded. All bottle necks, bases, or embossed fragments have been catalogued

Figure 1

RANCHO LOS CERRITOS
PLAN OF HOUSE AND GARDEN

AREA OF INVESTIGATION



and saved; small fragments were sorted by color, recorded, and discarded. Although technical studies are beyond the scope of this investigation, soil and adobe samples were recovered in the hope that pollen analysis may be possible in the future.

The cultural materials, together with catalogue, field notes, level records, and photographs, have been returned to Rancho Los Cerritos, City of Long Beach, for curation, future reference, and interpretation.

3. DESCRIPTION OF THE STRUCTURE AND UNIT EXCAVATIONS

Beyond the first concerns of measurement and mode of construction, a primary question was whether the walls of the central two-story adobe and its wings had foundations of stone or fired brick. A second set of questions pertained to the contemporaneity or sequence of construction for the three elements of the building. Descriptions of each unit provide the data upon which the conclusions are based.

Unit 1: Unit 1 was situated in the northeast corner of the westernmost room of the south wing, presently interpreted as the foreman's quarters. The location was chosen to determine if floors were present and to examine the nature of the foundation in the most remote portion of this wing where an exterior wall joins an interior partition.

A concrete floor had once been installed, but had been removed in the past to repair a water leak in the room and replaced with a compacted earth surface. The uppermost 4-5 cm of tamped earth was interpreted as overburden and was not screened. The presence of modern artifacts indicated that the soil was disturbed. Between 5-8 cm below the surface, a second hard surface was encountered which contained glass, bone, and ceramic fragments. The presence of artifacts suggested it was a floor.

The presence of a floor called for caution in excavation, and the next two levels were dug in 5 cm increments. By 20 cm, no further evidence of floors had been uncovered, and 10 cm levels were reinstituted. From 20-50 cm, the levels were characterized by pervasive rodent and root disturbance. The roots were larger with depth and averaged 2 cm in diameter at the bottom of this zone. Cultural material within these levels included nails, glass, and marine shell. In addition, there were jumbled and

fragmented adobe bricks along the north wall of the unit, juxtipositioned to suggest that they had fallen from the top of the wall.

From 50 to 110 cm, below any evidence for floors, excavation continued in 20 cm levels to expedite reaching the base of the wall. At approximately 100 cm a soil change was observed, which subsequently was determined to be the lowest course of adobe bricks (Figure 2). The base soil consisted of a reddish sandy clay, well defined in contrast to the gray and tan of the adobe bricks and mud mortar. The walls were scraped back and the base of the walls was probed to determine if either brick or cobble foundations was present. Neither was found.

Unit 2: This unit was located in the main adobe parlor adjacent to the east exterior wall, just south of a temporary partition. A hardwood floor and concrete slab had been removed prior to excavation. The unit was begun as a 1 x 1 m square, but later was expanded 0.4 m east to expose the interior face of the exterior wall. The unit was excavated in 10 cm levels to a depth of 30 cm with all materials dry screened.

The uppermost 8 cm revealed a probable adobe wall running east-west across the unit. This was found by removing all loose materials from the surface, which exposed a linear alignment of adobe bricks, laid in stretcher bond, upon a compacted earthen surface. The bricks were approximately 2-3 cm below the overburden surface. The wall was 30 cm wide and 5 cm thick. There was one area where a differential color and texture suggested the presence of mortar between the bricks, but it was too amorphous to confirm.

Paralleling the adobe wall remnant, north side, was a redwood beam (8 x 15 cm) set in a 16 cm wide trench of loose fill and containing fragments of adobe bricks. The beam extended 4 cm into the east exterior wall, but did not appear to have been

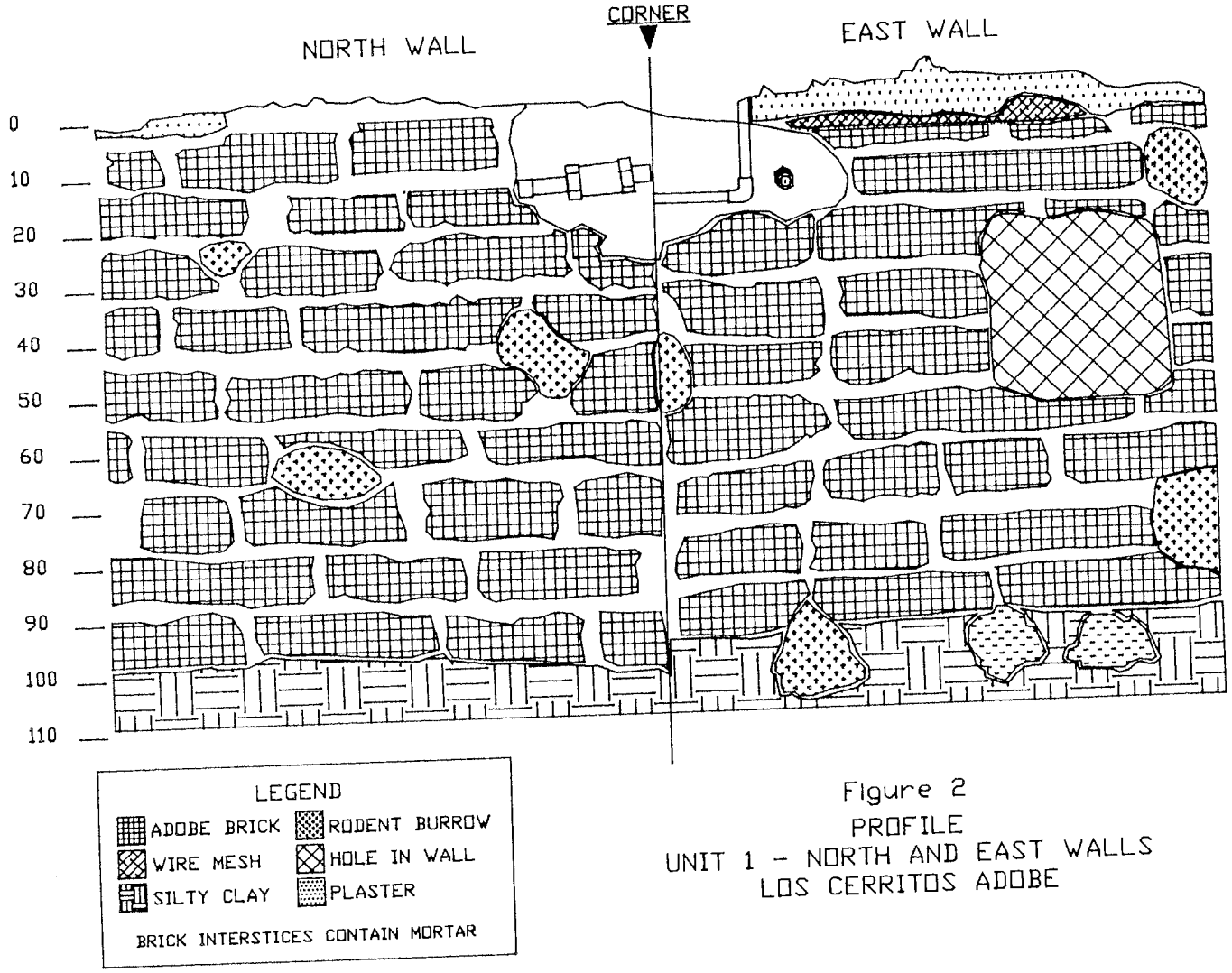


Figure 2
PROFILE
UNIT 1 - NORTH AND EAST WALLS
LOS CERRITOS ADOBE

cut into the adobe bricks of the the east wall. The wood beam appears to have been a floor joist, although there was no evidence of nails (or nail holes) that would have secured floor planks.

On either side of the beam and adobe bricks was a very hard surface. After removal of the beam and bricks, the excavation was continued. Historical materials sharply decreased in subsequent levels, while Native American flaked stone increased. The soil was hard and compact, characterized by a light brown color and silty clay texture. By approximately 30 cm historical cultural materials were absent, although flaked stone continued to be recovered. In the interest of pursuing the primary objectives, screening was discontinued and the east side of the unit was extended to meet the exterior wall. Unfortunately, the concrete apron, adjacent to the east wall of the building, only permitted inspection of the bottom half of the lower course of the exterior wall. Nevertheless, this permitted a reduced but accurate examination of this wall. The profile revealed that the adobe bricks of the interior partition interlocked with those of the exterior wall. To accommodate the interlocking brick of the interior wall, a brick in the northern exterior had been reduced by half.

Unit 3: The purpose of this unit in the north wing was to obtain a plan view of a postulated interior partition wall where it was presumed to join an exterior wall on the courtyard side. That a transverse wall had existed in this location was predicted from extrapolation of early floor plans and arches at the ceiling level interpreted as remnants of this wall. In 1930, a portion of the wall was removed to facilitate passage, leaving a relict archway at the ceiling. The gap provided an opportunity to gain a plan view and profile of a former wall and evaluate the stacking pattern of its bricks (Figure 3). Due to the constraints of space within a narrow hallway, the unit was 60 x 140 cm in surface dimension.

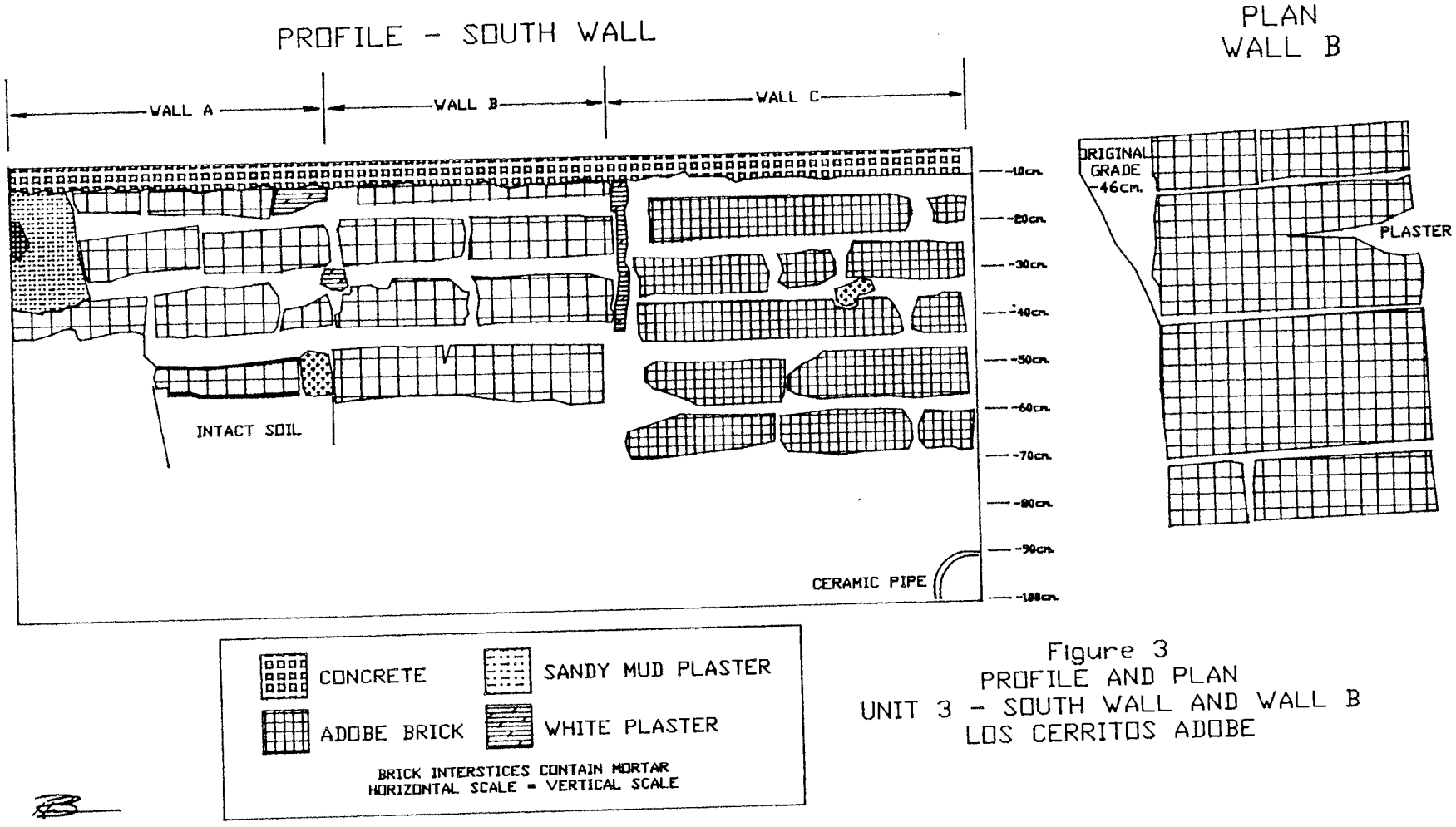


Figure 3
PROFILE AND PLAN
UNIT 3 - SOUTH WALL AND WALL B
LOS CERRITOS ADOBE

Initially, the upper 30 cm consisted of disturbed rubble, characterized by fragmented adobe bricks and historical artifacts. At 30 cm adobe bricks, oriented north-south, were encountered across the center of the unit, representing a wall approximately 60 cm wide. Rubble was recovered on both sides of the wall until a compacted surface was encountered at 110 cm on the east side and 120 cm on the west side. At this depth an indurated clay surface constituted the base stratum. Whitewash was present on the west side of the wall, although none was found on the east side. Shaving the west side of the interior wall indicated that the whitewash only extended down for a single 10 cm course. This places the whitewash 30 cm below the current wood floor. It was noted that under the first course of bricks was a fine silty soil approximately 0.5 cm thick and may represent some type of mortar. The south side of the unit was expanded into the exterior wall to examine the joining.

Examination of the exterior wall bricks revealed differences between those east and west of the partition wall. Those east of the interior wall were a medium gray-brown with flecks of lime. The size appears to be similar to others observed, 10 x 30 x 56 cm, and they are laid in header bond. The mortar is a brown clay, measuring 2 - 6 cm thick. A single coat of coarsely applied whitewash was found on the mud plaster. The bricks found in the interior wall did not appear to interlock with the east wall. Observations were hampered by the limited exposure and fragmentary nature of in situ bricks.

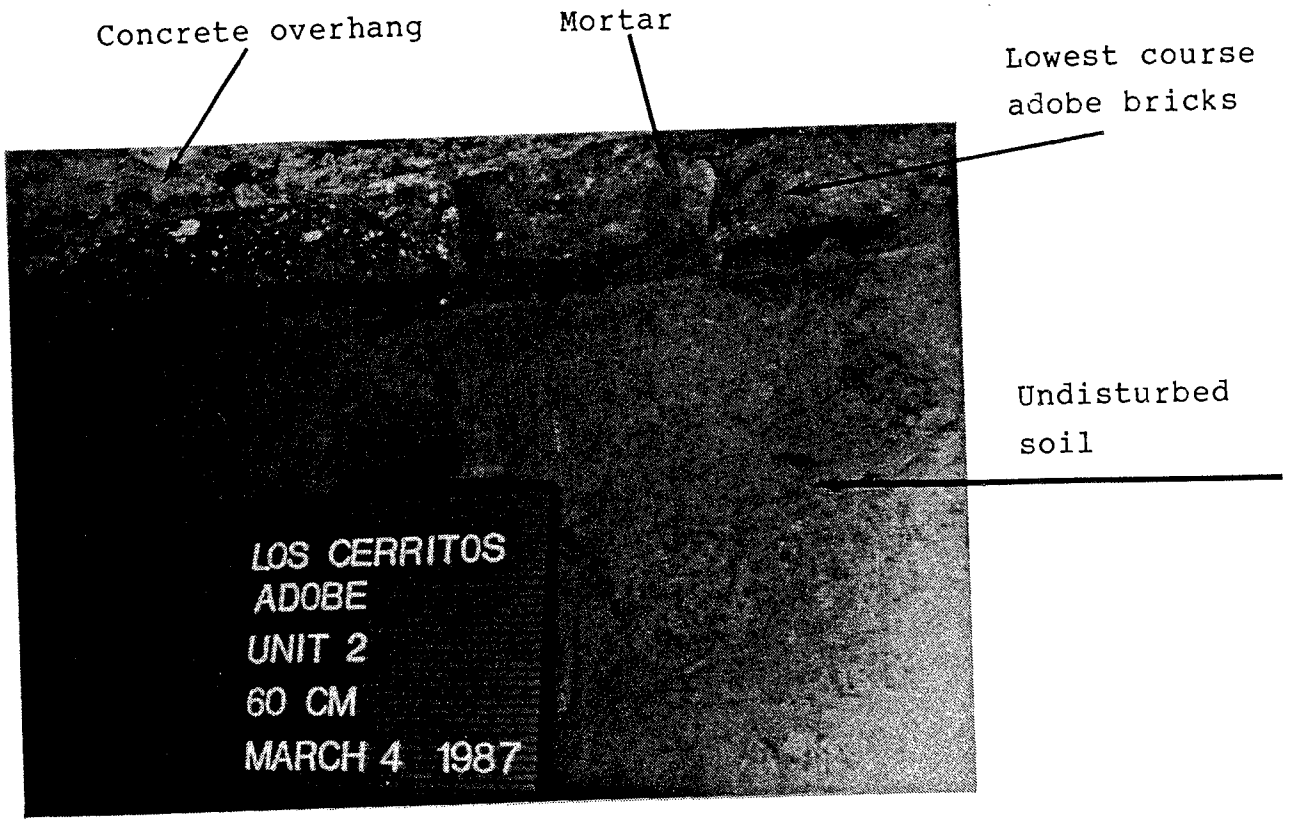
The bricks on the west side of the interior wall were distinctly different. These were dark gray and bonded with a dark brown mud mortar. The size of the adobe bricks is 10 x 30 x 56 cm, and they are laid in alternating courses of header and stretcher bond. The thickness of the mortar averages 5 cm. The base course of the wall does not contain any evidence of mud plaster. However, excess mud mortar appears to have extruded, filling the

shallow trench dug to set the bricks. Whitewash was found over the mud plaster in various locations on this wall. The whitewash is identical to that found on the east wall section.

Foundations

A primary objective of the study was to determine the nature of the foundations for the adobe and wings. It had been reported (Smith 1974:62) that John Temple had brought fired bricks around the Horn from the eastern United States for his walkways and building foundations. This had never been tested or confirmed. The exposed profiles of these walls indicated that there were no foundations whatever (Figure 4). All three units, which had been strategically placed to expose corners of different walls, demonstrated that shallow trenches had been dug and the adobe bricks laid within them directly on the earth. There were no cobble or fired brick foundations.

Figure 4. East wall of Unit 2



Plaster and Mortar

Plaster was found primarily in Unit 3, some of which had traces of blue paint on the whitewash. The plaster ranged from 2 to 5 cm in thickness and was applied over a medium brown mud coating (1.5 to 2.0 cm thick). Mortar was similar in color to the adobe bricks, except in the basal courses of Unit 3, and averaged 4-6 cm thick. In Unit 3, Wall C, it appeared that the basal two courses of adobe bricks were set in a dark brown mud mortar. The basal courses in Units 1 and 2 did not show any evidence of mortar.

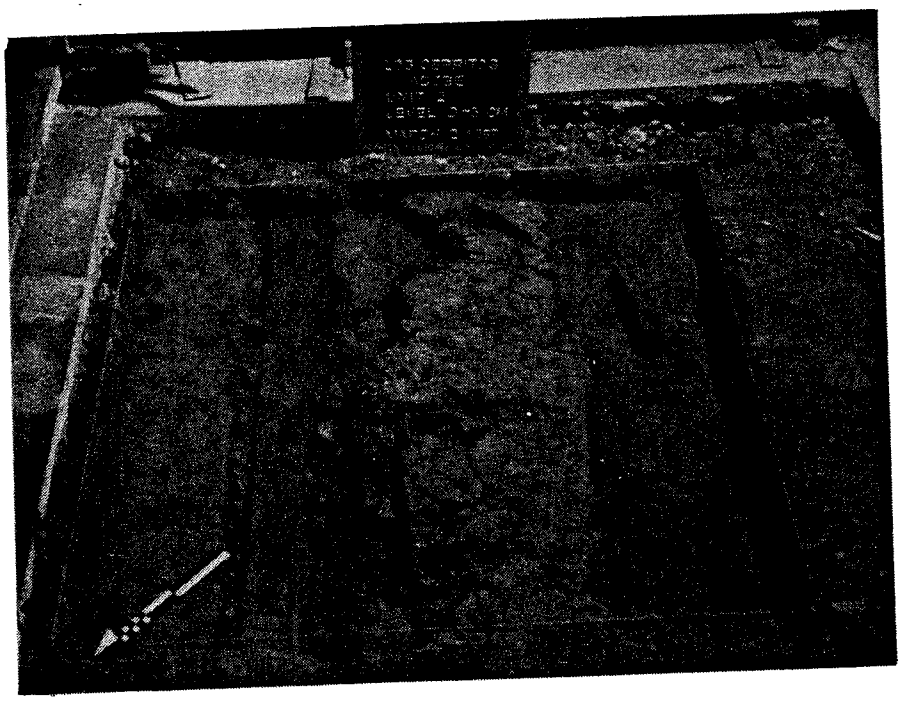
Sequence of Construction

The second question, regarding the sequence of construction, proved to be more elusive, although new information was obtained. The profile of Unit 3 (north wing) revealed a possible maximum of three chronologically separate walls. The north-south wall appeared to have a cold joint with both the east and west extensions. In addition mud plaster and whitewash were found adhering to the west side of the center wall. This plaster was also present where the west wall joined the interior north-south wall. The eastern extension also appeared to be a cold joint with the interior wall, although this was less clear than the west wall extension.

Evidence from Unit 3 (north wing) indicated that the interior wall of the room had been built first. Although the data are inconclusive, the east wall may also have been built at the same time. The section of the wall west of the interior wall was definitely added at another time; whether it was days or years is unknown. This conclusion was based on the presence of a cold joint, the presence of whitewash and mud plaster within the joint of the two walls, and marked differences in adobe brick color and constituents. These facts suggest that the two walls were built at different times (Figure 7).

Evidence of contemporary construction of inner and outside walls was found in Unit 2 (east wing), located in the center of the adobe's main parlor. An interior wall known to have existed in this location, but since razed, was relocated (Figure 5). The bottom course of this partition wall was found in situ, and it was revealed to interlock with the exterior wall.

Figure 5. Remains of Interior Wall



The investigation revealed unanticipated evidence that the west end of the north wing was an addition, and further suggests that the south wing had also been extended. In addition, it is possible that the interior wall and possibly the north exterior wall of the wing may have originally represented the courtyard perimeter. These sections might have been later enclosed and roofed. If the wall section east of Unit 3 (north wing) did interlock with the interior wall, then it is probable that the north wing was originally intended as a structure. If so, then

the interior wall may have once extended south all the way to join the south wing. That the interior north-south wall was once an exterior wall is also suggested by the lack of original openings or passageways in the wall. Although the wall has been cut away twice, once for a closet and secondly to extend the hallway, neither appears to resemble other openings in the wing.

The presence of tar nodules in Unit 1 of the south wing suggests that brea may have been used to cover an early roof. Early photographs (Smith 1974:47) illustrate that the wings originally had flat roofs. If these were covered with pitch, and both the north and south wings had been extended as the archaeological data seem to imply, then the period of expansion must have been relatively early, as opposed to the 1930s when the known renovations took place. This would have been during a time when the roofs were flat, and prevailing custom was to seal them with asphaltum and sand, as opposed to tiles or shingles.

4. CULTURAL MATERIALS

Domestic

Ceramics

Ceramic fragments provided a tantalizing array of wares and types typical, for the most part, of the nineteenth century with only a few sherds possibly representing the first decades of the twentieth century. There were no whole vessels, and no impressed marks or backstamps.

The earliest specimens are probably the two pieces of blue edged pearlware, and one example each of Majolica and Chinese porcelaneous stoneware. The blue decorated ware is feather edged, hand painted from the rim toward the well. Both are plate rims, although not necessarily from the same plate; catalogue number 42 was recovered at 90-110 cm in Unit 1, while no. 74 was found in Unit 3, while clearing the rubble around the partition wall. The Majolica sherd is very small, creamy glazed over a tan body, with no pattern on the fragment (2; Unit 1, 0-5 cm). The Chinese piece is the rolled (outward) rim of a rice bowl, grayish-blue glaze on a very fine gray body, hand painted in blue under the glaze (6; Unit 1, 0-5 cm). The pattern is a floral element typical of South Provincial Chinese decoration variously called Swatow or Blue Flower. It is a ware used by Overseas Chinese, not Export porcelain which was shipped for sale to Euroamericans. There were at least two Chinese employed at Los Cerritos in the 1870s-1880s, and other Chinese artifacts recovered by the field schools included stoneware food containers, porcelains, glass medicinal vials, and coins (Evans 1978). Also from Unit 1, 0-5 cm, is a tiny rim sherd (1), probably a plate decorated in very dark flow blue, typical of the same period.

Of later origin are two decal-decorated rim fragments. One was probably a cup (4; Unit 1, 0-5 cm) with a narrow black band

broken by an urn in resist, further embellished with gilt, on the exterior surface. The other is the molded earthenware brim of a plate or soup bowl, with a polychrome floral motif of small purple flowers and green leaves (79; Unit 3, rubble). A white porcelain knob, probably from a tureen or covered vegetable dish, is 3.5 cm in diameter and 2.5 cm from the point of attachment (75; Unit 3, rubble). Seven nondiagnostic whiteware fragments, one porcelain, completed the ceramic inventory. Their provenience reflects the same distribution as sherds described above: three from Unit 1, 0-5 cm, and four from Unit 3, rubble around the wall.

Comparable feather edged sherds were recovered during the field school excavations outside the courtyard, along with a blue transfer print made in France, an overpainted green transfer print, and a handpainted polychrome floral (Chace 1969:44-46). An unpublished summary mentions the following types as present:

> ...striped slipped ware, a variety of transfer printed wares, hand painted flowered "Continental Peasantry ware," blanket stitched and embossed white wares, some undecorated sherds - all earthenwares, and two sherds of porcelain, one of which was Oriental [Chace n.d.:4].

The deposit which contained these materials was tentatively dated to ca 1850-1860. The backstamp on one unprovenienced fragment at Los Cerritos has been identified as the product of Pinder, Bourne and Hope, a British firm operating 1851-1862 (Godden 1964:495).

Glass

Identifiable glass artifacts were rare. One fragment of a milk glass canning jar lid liner (76) was recovered from around the wall in Unit 3, and an aqua shoulder fragment of what was most likely a canning jar (20) in Unit 1, 15-20 cm. A curved, cut or pressed, decorative clear glass vase or other vessel (19) came from the same level of Unit 1. The only recognizable bottle

finish was a small, broken patent lip, no greater than 1.5 cm in diameter (10; Unit 1, 0-5 cm); it appears to be sun colored amethyst.

All small, nondiagnostic shards were sorted by color, and by type where possible, e.g., container or window pane, and were then discarded. Container fragments amounted to only 30.7 g in Unit 1 and 22.4 g in Unit 3. Colors represented in Unit 1 were clear - 26.8 g; olive - 1.1 g; brown/amber - 1.4 g; and aqua - 1.4 g. In Unit 3, 0-10 cm, there were 0.4 g of lamp chimney glass, 1.7 g of clear bottle glass, and 0.6 g of olive shards; there were 2.8 g of clear container glass in the 10-20 cm level, and from the rubble around the wall: olive - 12.2 g; clear - 4.6 g; and amber - 0.1 g. This low recovery implies that glass containers were perhaps rare in the early occupation of the adobe, and that subsequently, they were systematically discarded in one of the known trash pits outside of the courtyard.

Personal

One shell button (37; Unit 1, 70-90 cm) represented an early, pre-industrial type, well decorated but crudely made with the natural outer layer of the shell present on the back. It is 1.1 cm in diameter, with an incised line around the edge, raised center, and two perforations in a central fish-eye. The only other clothing fastener was half of a nickeled safety pin (82; Unit 3, rubble).

In a previous summary of 145 buttons from the site, 45 or 31 percent were made of shell. Eight of these had two perforations; the example illustrated had a fish-eye (LeVine 1975:59-74), but lacked the additional detail of the button described above. It was the author's conclusion that the shell buttons were used on better quality garments, and that they may reflect the Temple occupation.

Related to sport, self-defense, or subsistence was a single cartridge casing (81) from the Unit 3 rubble around the wall. It is a rimfire, .22 short, headstamped "P" for Peters Cartridge Co.

Architectural

Considering the age of the structure and documentation of several phases of alteration, it is perhaps surprising that only 45 nails were recovered. Cut nails predominated by a ratio of 2:1 (Table 4.1), but all were either too corroded or fragmentary to determine pennyweight.

Table 4.1. Distribution of Nails

Provenience	Cut	Wire	Other	No ID	Total
Unit 1					
0-5	2	2	1 tack	2	7
5-15	-	-	-	-	0
40-50	3	-	-	-	3
50-70	1	-	-	-	1
70-90	4	-	-	-	4
90-110	1	-	-	-	1
Unit 2					
8-10	6	6	4 tacks	7	23
10-20	-	-	-	1	1
Unit 3					
Wall rubble	5	1	-	-	6
Total	22	9	5 tacks	10	46

Where provenience could be ascribed, round wire nails were restricted to the uppermost levels of Units 1 and 2. In the former, cut nails were recovered from the surface to 110 cm, perhaps evidence for repeated modifications from an early date. In Unit 2, the abundance of round wire nails and tacks may be

related to the installation of comparatively recent flooring on the joist which was discovered.

Window pane glass was present in all units: 10.1 g in Unit 1; 1.6 g in Unit 2; and 1.8 g in Unit 3. It was green-tinged when viewed in cross section only in the upper 0-15 cm of Unit 1; these fragments averaged 1.9 to 3.0 mm thick. The balance of the pane glass was colorless in section, ranged in thickness from 1.6 to 2.0 mm, occurred in the 40-50 cm of Unit 1 and in the rubble around the wall in Unit 3, and is presumed older.

Nodules of asphaltum were recovered from Units 1 and 3, suggesting use in the earlier, flat roofs of the two wings. Traces of blue paint were observed applied over the whitewash (68) in the rubble fill of Unit 3. A wrought iron door hasp was described by Evans (1964).

Subsistence

All shell and bone fragments were weighed (Table 4.2). Of the shell, 77 percent of all identifiable fragments were speckled scallop (Argopecten aequisulcatus). Other species present, in descending order of abundance, were California chione (Chione californiensis), wavy chione (C. undatella), San Diego scallop (Pecten diegensis), single specimens of red abalone (Haliotis rufescens) and bean clam (Donax gouldii), and fragments which may represent bubble shells (Bulla gouldiana ?). With the exception of the abalone, all are species typical of mud or sandy bottoms of bays or lagoons, and would have been gathered locally. One fairly large piece of pecten was observed embedded within an adobe brick in Unit 1 (14, 0-5).

The bone has not been analyzed, but includes specimens attributed to cattle (some sawed), birds, and rodents. Bovine elements include long bones, ribs, vertebrae, and one astragalus. Sheep

bone has been emphasized in earlier descriptions (Evans et al. 1970).

Table 4.2. Weight of Shell and Bone

	Shell		Bone		Excavation	
	Grams	%	Grams	%	m^3	%
Unit 1	48.5	61	353.9	63	1.10	45
Unit 2	5.5	7	37.3	7	0.39	16
Unit 3	25.8	32	170.4	30	0.96	39
	79.8	100	561.6	100		

Interpretation of the relative quantities must consider the different volumes excavated in each unit. It is notable, first, that the total weights of bone and shell in each unit, expressed as a percent of each class total, appear at least superficially the same (Table 4.2). Yet, there is a significant difference between the quantities recovered and the amounts predicted from the relevant volume of each excavation unit. There is substantially more shell and bone in Unit 1, and less of both in Unit 2; the quantities in Unit 3 are only slightly lower than predicted from the unit volume. In Unit 1, both shell and bone were present from surface to termination at 110 cm; the greatest content in the unit (92.8 g) was actually recovered at 90-100 cm. The highest yield was 149.6 g contained in the rubble fill around the wall in Unit 3.

Other than intrusive rodent bone, the fauna are interpreted as historical, and the proportions suggest that butchering, consumption, or both, took place in the area of Unit 1, either before or after this room was constructed. The bone in Unit 3 is closer to the historical location of the kitchen, but because of the disturbance caused by the wall discovered in this unit, it cannot be determined from evidence to date when the remains might have been discarded.

More than half of all shell occurred in Unit 1, possibly an addition to the original structure. This may represent consumption by the Indians then living in the vicinity, and some part of all the shell may have been incorporated into the making of adobe and calcining of shell for mortar. Interpretations are tentative at this stage in the research, since the lowest proportion of shell occurred in Unit 2, which contained the greatest number by far of all worked stone flakes (Table 4.3).

Prehistoric

Although each of the three units contained at least one stone flake, these were most abundant in Unit 2 (Table 4.3), where the volume excavated was by far the lowest. The flakes were typically small, all 2.6 cm or less in length, and most were chert. Almost all were unifacial, interior (tertiary), and could represent byproducts during tool manufacture or maintenance. The totals presented in Table 4.3 refer to such flakes, except as indicated by asterisk and discussed below.

Table 4.3. Distribution of Worked Stone

Provenience	Chert	Chalcedony	Steatite	Total
Unit 1				
30-40	1	-	-	1
40-50	1*	-	-	1
90-110	1	-	-	1
Unit 2				
0-8	1	-	-	1
8-10	2	-	-	2
10-20	19	3	1*	23
20-30	11	-	-	11
30	1*	-	-	1
Unit 3				
Rubble	-	1	1	1
Total	37	4	1	42

* = see text below

The flake from Unit 1, 40+ cm (94), shows bifacial workmanship and may be a preform, reject, or artifact broken during manufacture. The steatite fragment from Unit 2 (87) is a tiny crumb, lacking ground or finished surfaces, but represents an imported lithic material prized by the Indians. The example with the most workmanship (95, Unit 2, 30 cm) is bifacially flaked of a mottled black/brown/white chert; the break is old, but the artifact may have been a blade or large projectile.

Although none was recovered during this investigation, it should be noted that many examples of locally made Indian pottery were recovered from the earlier excavations outside the courtyard. Called Cerritos Brown, in the Tizon Brown Ware series, the collection included a large olla, hemisphere shaped bowls, a small globose jar, small clay balls, a finger-molded vessel, and fragmentary figurines (Evans 1969:71-78). The quantity was reported as "impressive."

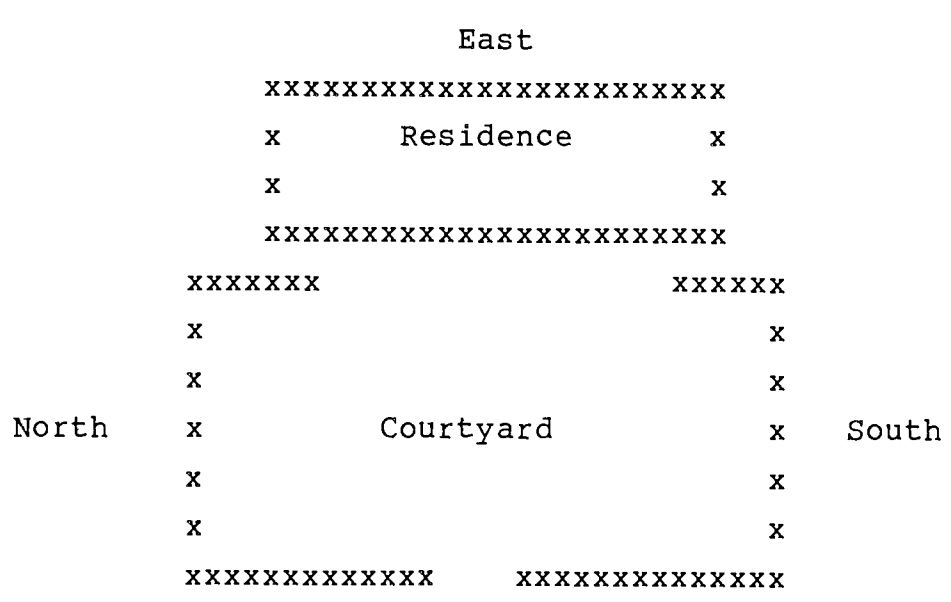
5. CONCLUSIONS

Summary

Differences in the composition, size, and bonding of the adobe bricks and the cold joints between various walls led to the conclusions that: (a) the present north wing of the adobe had been extended subsequent to the original construction; and (b) the interior wall in Unit 3 may once have been part of the courtyard enclosure and only later incorporated into rooms or, alternately, it may have at least anchored the north end of the courtyard wall.

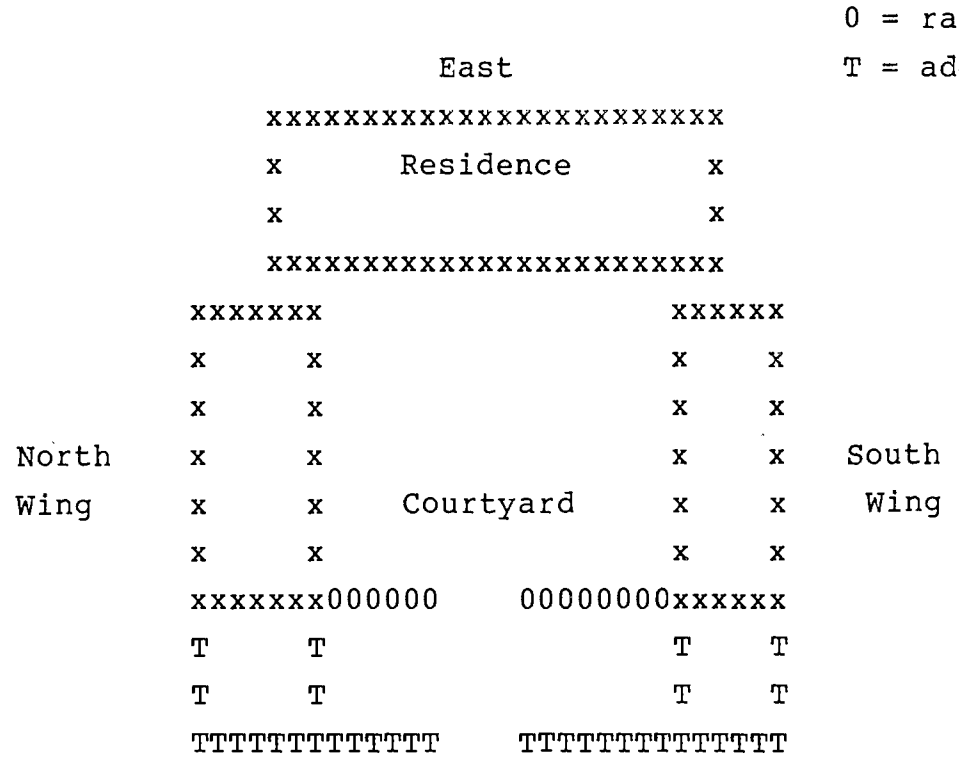
It is probable that the main two story adobe was built first. Then either a courtyard wall was built (Figure 6), or the two wings were constructed (Figure 7). If only the wall had been built, then it was later enclosed and roofed to form the north and south wings. At some later time the north and probably the south wings were extended to create more rooms as depicted in Figure 1.

Figure 6. Scenario 1



In this scenario (Figure 7) the older courtyard wall is prepresented by "0" and is razed. The westerly extensions are added to the wings "T" and a new courtyard wall is built "T".

Figure 7. Scenario 2



The investigation demonstrated that architectural features can be revealed archaeologically. Neither historical nor architectural research had yielded any suggestion about the lack of foundations, possible additions to the wings, the original size and configuration of the courtyard, nature and sequence of historical modifications, or other details not available in the existing documentation. Historical photographs do suggest alterations in the northeast corner of the courtyard where an opening in the north wing seems to lead to a carriage shelter, and that the courtyard was once shorter from west to east, although perspective would need to be verified through photogrammetry. Early pictures confirm that the wings once had flat roofs.

Although the phenomenon is relatively rare, Rancho Los Cerritos is not the only adobe built without any demonstrable stone or brick foundation. At the Casa de Pedrorena in Old Town, San Diego, the main portion of the adobe which dates from the 1860s was built on a stone footing, but a one-room extension, assumed to be a later addition, lacked a foundation and, in fact, failed (Glenn Farris, personal communication 1987). Details of a test excavation are not precise, but apparently De La Osa Adobe at Los Encinos State Historical Monument lacked foundations altogether:

> Digging disclosed that the adobe has no foundations. The lowest course of sun-dried bricks rests directly on the hard ground with no special footing and apparently without a mortar bed [Wallace 1962:179].

The Martin Adobe in San Bernardino, built in 1856-1857, does have a stone foundation, although in a Mormon adaptation, it has very thin walls and nine-inch adobe bricks (Peter Schulz, personal communication 1987). The Aros-Serrano Adobe in Riverside County, built by a Mexican family ca 1860-1870, also has a stone footing, although the interior floor plan has Anglo elements (Greenwood, Foster, and Duffield 1987). In San Diego, an unidentified small adobe behind the Colorado House (a wood frame hotel), possibly a cold house or used for storage, had no foundation; it was built at an unknown time after the 1850s and prior to 1872 (Peter Schulz, personal communication 1987). At the Rose-Robinson site in San Diego Old Town, excavation demonstrated a number of stone foundations variously interpreted as footings for the wall which once enclosed the plaza, fill for a sewer trench, and possible remains of a dwelling gone by 1849; however, the adobe walls of the large two-story structure built by American-born James Robinson ca 1853 were laid directly on the ground with no cobble footing whatever (Schulz, Quinn, and Fulmer 1987:12).

At this stage in adobe research, there is not yet any consistent correlation between the presence of foundations and either cultural tradition, i.e., Anglo or Hispanic building practise, or chronology. These, and any possibility of regional tradition or diffusion, are only the more obvious directions for inquiry; as the century progressed, there would be less Indian labor available, and fewer surviving Indians who had experience or training at the missions. Those who came to California from the east or midwest had other traditions even if, as the Mormons, they chose to build with adobe. Suitable stone may have been more or less readily available in different areas.

Yet, the lack of a foundation at Los Cerritos is an exception to the prevailing tradition in early California, and contrary to sound construction practices which usually raised the permeable, water-soluble adobe bricks above the surface level. It is apparently a fairly early example of this transition and demonstrates, once again, that the great variability among adobe structures underscores the danger of assuming any conclusions without sound evidence.

The test excavation was too limited to correlate with any certainty the high proportion of bone recovered in Unit 1 with possible consumption in a room said to have been occupied by the ranch foreman. Whether the faunal remains were deposited before or after this room was built, the percentage of all bone from this unit significantly exceeded the predicted distribution. It would be tempting to relate the next highest abundance, in Unit 3, to proximity with the kitchen of the family residence, but the proportion is congruent with the unit volume and the area has been greatly disturbed. The percentages of total shell and bone recovered from Unit 1 (61 and 63 percent, respectively) at least suggest that this area was utilized, and the food remains deposited, before the room was built.

Evaluation

The archaeological resources have the qualities of integrity and scientific research potential sufficient to meet the criteria for eligibility to the National Register of Historic Places. The walls and features are undisturbed and unmixed, and have already provided important information about the chronology and sequence of developments affecting the adobe. Future efforts may yield a very precise chronology of the structure's architecture, maintenance, and remodeling. There are known subsurface features and cultural deposits dating to the rancho period outside the structure which were discovered by the field schools, but which have never been systematically excavated or analyzed. One of the two trash features sampled is said to be older than the other; it has been suggested that materials from the earlier deposit, believed to be an adobe borrow pit used during construction, may be associated with the Temple family, while the other feature, in a natural drainage area, may have been used by the Bixby family for their discards after 1866 (LeVine 1975:72; Evans, personal communication 1987). Although individual artifacts recovered during this limited investigation were both few and fragmentary, they could be correlated with the very large assemblages from outside the courtyard to yield fairly precise data about the sequence of construction and alteration, and associations with specific families. They have the continuing potential to reveal insights into the lifeways, subsistence patterns, economic status and endeavors, and degree and direction of acculturation of two of the most prominent California pioneer families, and into the persistence of Native American traditions in a situation of culture contact.

Recommendations

The unanticipated complexity of the structural remains will challenge and complicate the City's objectives of preserving and interpreting the adobe. Yet, if the technical problems can be

solved, the opportunity to display the sequence and methods of construction will provide a unique experience to the visitors. Since the key aspects of the architecture are indoors, it should be possible to develop a number of protected exposures which will display not only the methods and sequence of construction, but illustrate how these conclusions were reached. It is suggested that selected segments and intersections of the walls should be left open for public viewing, perhaps under protective, transparent cover.

While this investigation was focused toward objectives which mandated small, dispersed test units, any future excavations should consider broad block exposures for better understanding of the wall articulations, nature of possible feature depositions, artifact associations and activity areas, the interpretation of the original gradient, and further testing of the architectural conclusions. To assess the postulates developed about the wings, it will also be necessary to examine key areas of the current walls below the modern surfacing.

In any future excavations, it is recommended that soil samples be subjected to flotation to recover small plant parts or seeds; fish bones, scales, or otoliths (ear stones); or other small cultural material which may further illuminate the subsistence pattern, prevailing environment, and ranch activities.

Another analytical technique which could contribute to a fuller interpretation of this building is the identification of plant pollens contained in the adobe bricks, which will permit a technical comparison of the mud and water used to make the bricks in the two-story residence, the courtyard wall, and both phases of the wing(s). The identification of pollens has proven to be a very sensitive indicator of the sequence and chronology of wall-building, as well as of the replacement of native vegetation by introduced crops and range grasses. It could determine whether the various walls were contemporary, and could

possibly provide an absolute sequence for the successive phases of construction and further relate specific floors to the adobe bricks. Significant areas to be tested could be accurately defined by photogrammetry, based on historical photographs.

All of the Los Cerritos property inside or outside the adobe should be regarded as sensitive for cultural remains, and even minor impacts on the surface should be monitored closely. Indoors, architectural remains such as the joist, adobe bricks, and wall plaster were found just beneath the modern wood and concrete flooring. Before any grading, construction, subsurface repairs or installations, or other intrusions below current grade or floors take place, the location should be evaluated for cultural resource sensitivity; tested, if necessary; and unavoidable potential impacts to cultural resources mitigated by scientific data recovery. Two subsurface deposits and a possible brick foundation outside the structure have already been identified by Evans, the location of the barn is known, and additional features and perhaps more structural remains may be present.

The contents of the trash pits sampled by the field schools should be catalogued and analyzed; the information contained is relevant to analysis of the structure, its rehabilitation and interpretation. Cultural materials exposed during grounds maintenance should be collected with a record of their location, and curated until professionally identified and evaluated. Policies and procedures for accession, cataloguing, and curation should be developed.

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SUBMITTED TO:
The City of Long Beach
Rancho Los Cerritos Historic Site
4600 Virginia Road
Long Beach, California 90807

PROJECT NUMBER: 95-1124

MAP: USGS Long Beach, California 7.5 Minute Quadrangle 1964, Photorevised 1981

ACREAGE: Less than one acre

KEY WORDS: Los Angeles County; Township 4 South, Range 13 West, San Bernardino Base and Meridian; CA-LAN-696

APPENDIX F

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MANAGEMENT SUMMARY/ABSTRACT

PURPOSE AND SCOPE: The Rancho Los Cerritos adobe; located in Long Beach, Los Angeles County, California (see Area Map, page 2); required repairs to improve seismic stability. The required work is described in Plans and Specifications Number R-6283 (Long Beach City Engineer 1995). The Job Number assigned by the City of Long Beach is 421411-95.

The adobe consists of three major elements. The long axis of the main structure is oriented roughly along magnetic north and south. From the main structure, two wings extend to the west, one from the northwestern portion of the main structure and the other from the southwestern portion. The courtyard created by the main structure and the two wings is separated from the outside by a gated wall connecting the westernmost walls of the wings.

The current project involves repairs to and stabilization of the western portions of the two wings and the replacement of the connecting wall. The archaeological portion of the project was confined to those areas where soils were to be disturbed. Within the four such areas, a test excavation was completed to determine whether in situ historic or prehistoric deposits existed. Monitoring of the balance of soil removal was accomplished once the test excavations were complete. The excavation and monitoring was followed by laboratory analysis of collected material and preparation of this report.

DATES OF INVESTIGATION: The excavation portion of the project began on 30 April 1996 and was completed on 31 May 1996. Excavation was not continuous during this period, but was accomplished as work areas became accessible. Laboratory work was accomplished during the periods when excavation areas were not available, with the final laboratory work being completed by 21 June 1996. Portions of the report were prepared during the time period indicated above, but the bulk was written between the final laboratory work date and 23 September 1996, with minor corrective work following that date.

MAJOR FINDINGS: Excavations were confined to the Foreman's Room (Room 101) in the south wing, the Milk Room (Rooms 127-130) in the north wing and along the footing area of the courtyard wall. What is referred to as the Milk Room for the balance of this report was in reality the Milk Room in the nineteenth century. After 1930 it became the gardener's and chauffeur's areas. It is presently utilized for staff office space. It was discovered that the Foreman's Room

contained fill to the deepest depth of excavation. The fill contained both historic and prehistoric artifacts and ecofacts, but it was clear they were not in their original location of deposition. The fill, placed as part of a modernization in 1930, protected and preserved sand plaster and whitewash on interior walls. Apparently, this was the original wall treatment. Much more of this material is preserved within the Foreman's Room and probably in other south wing rooms as well.

The Milk Room (Rooms 127-130) excavations also encountered some fill, but mostly natural soils were present. Again, a scattering of historic and prehistoric material was recovered, but it was clear that extensive disturbance extended to the deepest levels of the excavations.

The courtyard wall area was viewed as quite promising for the discovery of in situ prehistoric deposits, since it was known that the wall had been in place since the mid 1840s and that a prehistoric site exists somewhere in the immediate area. Unfortunately, the units at the courtyard wall proved to be nearly sterile. Historic material was found in the upper levels and was probably introduced as a result of wall demolition. Very few prehistoric artifacts were found, and they were scattered.

EVALUATION: The Los Cerritos adobe has been included in the National Register of Historic Places since 15 April 1970 and was designated a National Historic Landmark on 3 August 1970. Dedication ceremonies were held on 2 October 1970. The adobe was designated a Long Beach Historical Landmark (Ordinance No. C-5479) on 27 February 1979 and a State Historic Landmark (No. 978) on 5 August 1988. Dedication ceremonies were held on 30 April 1989. Clearly, Rancho Los Cerritos is an important property (CEQA definition). This study adds new data to the body of knowledge relevant to the property.

PROJECT EFFECT: The project had very minor effect. All areas excavated were in fill, were heavily disturbed and contained relatively few artifacts and ecofacts.

CONSTRAINTS: The project was limited to small, discreet areas of investigation, so it is impossible to fully describe the archaeological deposits associated with Rancho Los Cerritos adobe. No other constraints were encountered.

SUMMARY OF RECOMMENDATIONS: The original interior wall treatment is an important feature of Rancho Los Cerritos, and has been preserved in the western rooms of the south wing. This material is quite fragile. It is suggested that Rancho Los Cerritos staff insure that great care

be taken when excavations in this part of the structure are contemplated. Excavators should be prepared to preserve and document as much of the original wall treatment as possible.

DATA DISPOSITION: The collections, notes, drawings and photographs made during the project are curated at the Rancho Los Cerritos Historic Site, 4600 Virginia Road, Long Beach, California 90807.

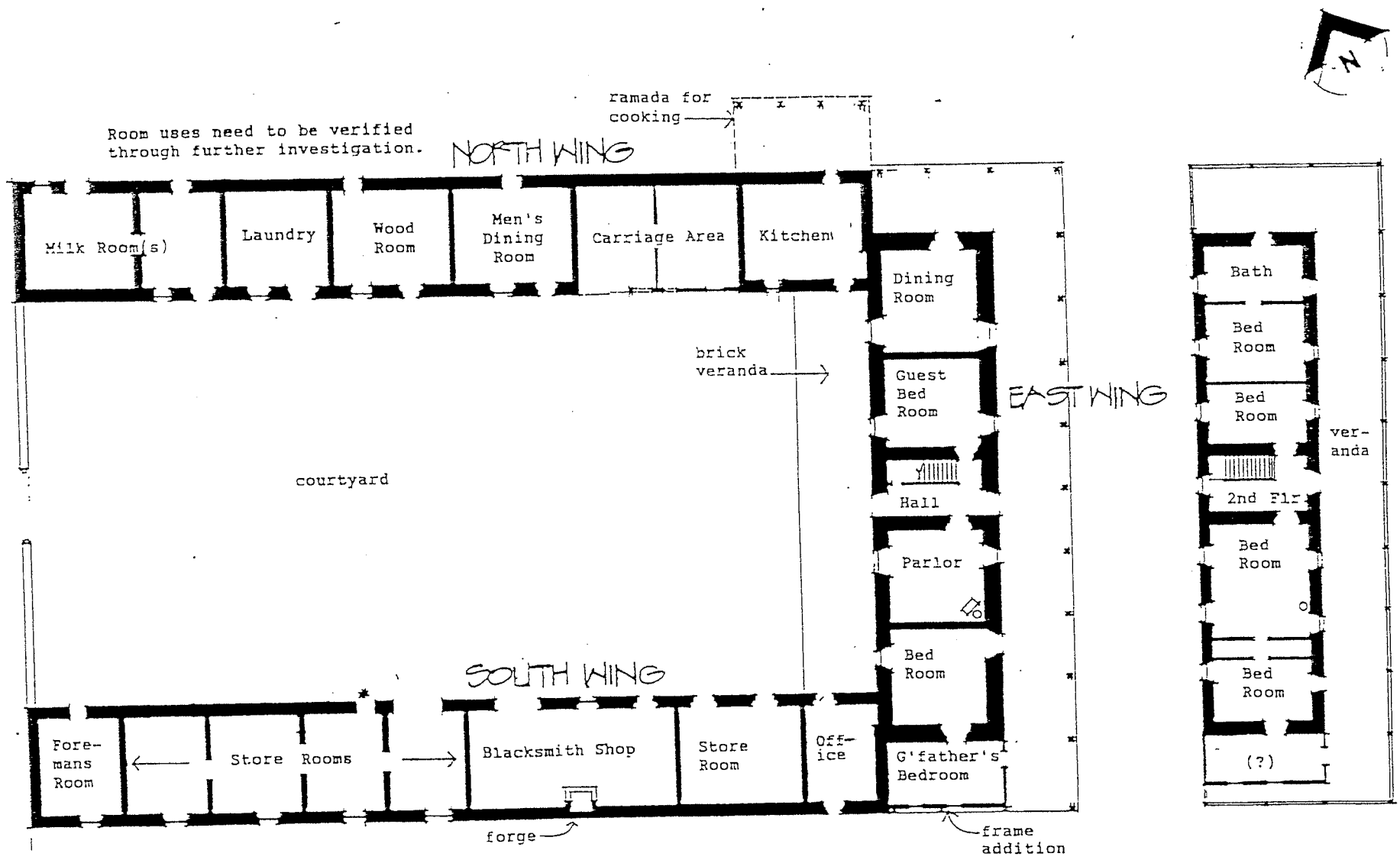
UNDERTAKING INFORMATION/INTRODUCTION

The central structure at Rancho Los Cerritos, Long Beach, Los Angeles County, California is a rectangular adobe building constructed as a residence in the 1840s (Figure 1, below). The main residence is two stories in height with the major axis oriented roughly toward magnetic north. Two single story wings extend westward from the northern and southern ends of the west wall of the main structure. Both wings were used primarily for support functions. A gated wall joins the western wall of the two wings, creating a large courtyard. The building underwent extensive modernization in the early 1930s. The entire structure and the surrounding grounds and buildings are now operated by the City of Long Beach as a museum. Rancho Los Cerritos is California Historical Landmark 978 (Dept. of Parks and Rec. 1990) and has been a National Historic Landmark and in the National Register of Historic Places since 1970. Rancho Los Cerritos is recorded with the California Archaeological Inventory as CA-LAN-696.

Rancho Los Cerritos was constructed of adobe bricks laid without foundation directly on native soils (Greenwood 1987, and confirmed during current study). Erosion and settlement created instability in the western portions of both wings. The City of Long Beach undertook the current project to stabilize the western portions of the two wings. The project included placement of concrete and steel interior footings to anchor the walls, removal and replacement of the courtyard wall, and roof repairs. The project is fully described in Plans and Specifications Number R-6282 for Rancho Los Cerritos Seismic Upgrade in the City of Long Beach, California (Office of the City Engineer 1995). The project was completed under City of Long Beach Job Number 421411-95. The Augustine Company, 8334 Claremont Mesa Boulevard., Suite 102, San Diego, CA 92111 was the primary contractor.

Excavations for the interior footings and those for the replacement courtyard wall were in archaeologically sensitive soils. RMW Paleo Associates served as a subcontractor to the Augustine Company to determine if in situ and important (as defined in CEQA) cultural deposits would be encountered in the footing excavation areas. Excavations for the footings were then monitored by RMW personnel. Other activities included laboratory quantification of collected material, archival research, review of the photograph files maintained at Rancho Los Cerritos, interviews with Rancho Los Cerritos staff and preparation of this report.

FIGURE 1: RANCHO LOS CERRITOS ADOBE PLAN VIEW



* Locations of historic doors and windows need to be verified through further field investigation.

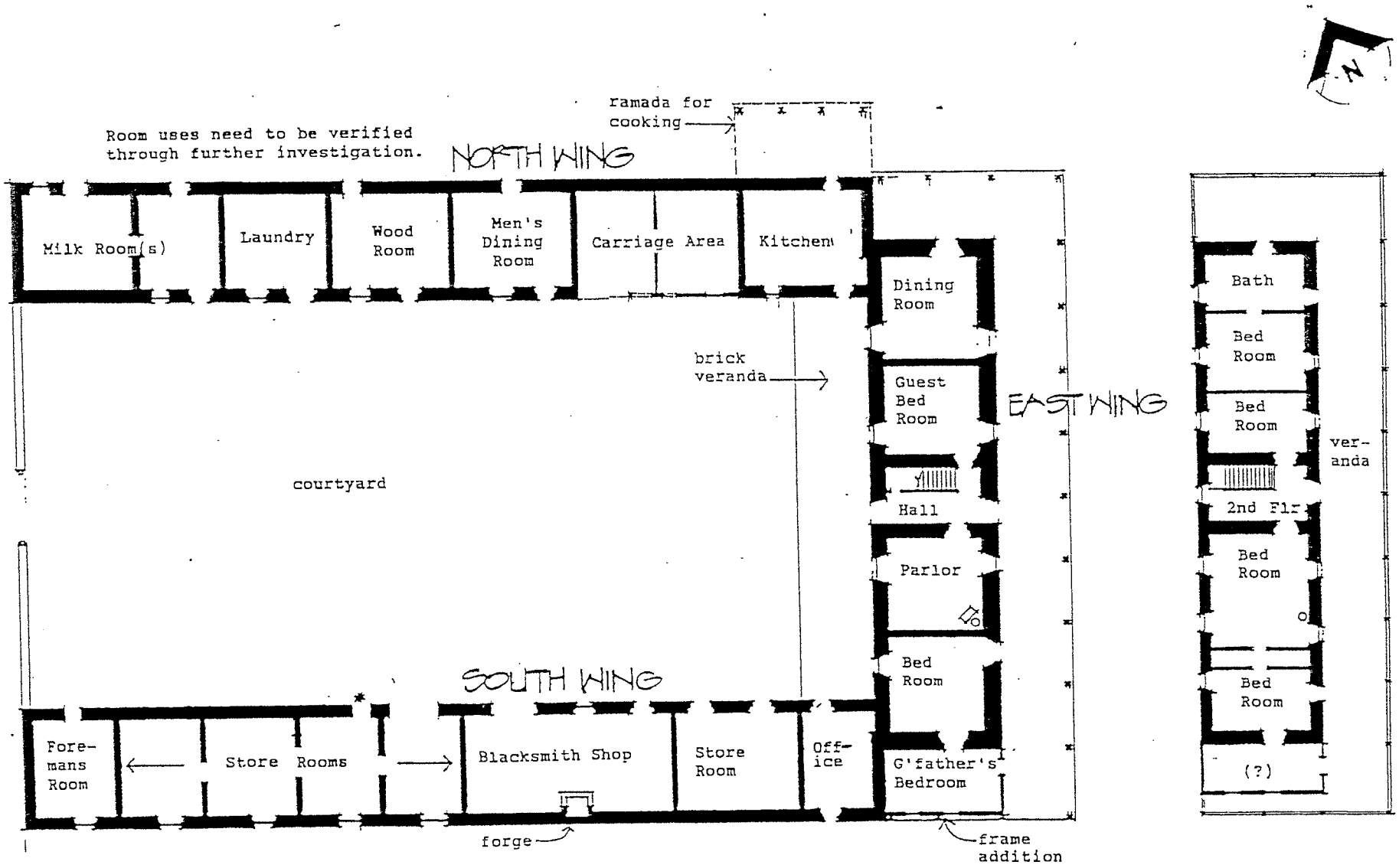
THE JOTHAM BIXBY ERA
1866-1881

Configuration based on:
. Smith's recollections
. Historical photographs
. 1987 field investigation

ADAPTED FROM RANCHO LOS CERRITOS

DOCENT TRAINING MANUAL

FIGURE 1: RANCHO LOS CERRITOS ADOBE PLAN VIEW



* Locations of historic doors and windows need to be verified through further field investigation.

THE JOTHAM BIXBY ERA
1866-1881

Configuration based on:
. Smith's recollections
. Historical photographs
. 1987 field investigation

ADAPTED FROM RANCHO LOS CERRITOS

DOCENT TRAINING MANUAL

The archaeological test excavations and monitoring occurred between 30 April 1996 and 15 July 1996. Those persons participating in the cultural resources portion of the project are listed in the following table. Resumes for all personnel are contained in Appendix A.

Table 1: Personnel and Duty Assignments

Name	Principal Duties
Ronald M. Bissell	Principal Investigator, Field and Laboratory Supervision, Monitoring, Report Preparation
Edward Knell	Excavation, Laboratory Supervision
Blanche A. Schmitz	Excavation, Monitoring, Laboratory Processing
Carol Bissell	Excavation, Laboratory Processing
Anne Retemal	Excavation, Laboratory Processing
Chris Morgan	Excavation, Laboratory Processing
Patrick Maxon	Excavation, Monitoring
Joan Brown	Research, Faunal Analysis
Sue Wade	Pottery Analysis

The maps on the following two pages depict the area around Rancho Los Cerritos as it currently exists.

SETTING

NATURAL: The area surrounding Rancho Los Cerritos is now completely urbanized and all of the major streams are channelized into artificial courses. The situation was quite different during prehistoric and early historic times.

Rancho Los Cerritos sits atop a bluff, the most prominent terrain feature in the immediate vicinity. The Los Angeles River, now in an artificial channel some distance to the west, once ran adjacent to this bluff. The river that approached Rancho Los Cerritos from the northeast was originally the San Gabriel. Flood events in the early 1860s caused the river to change channels and to empty into Alamitos Bay to the east. The same events changed the channel of the Los



Paleontology
Archaeology
History

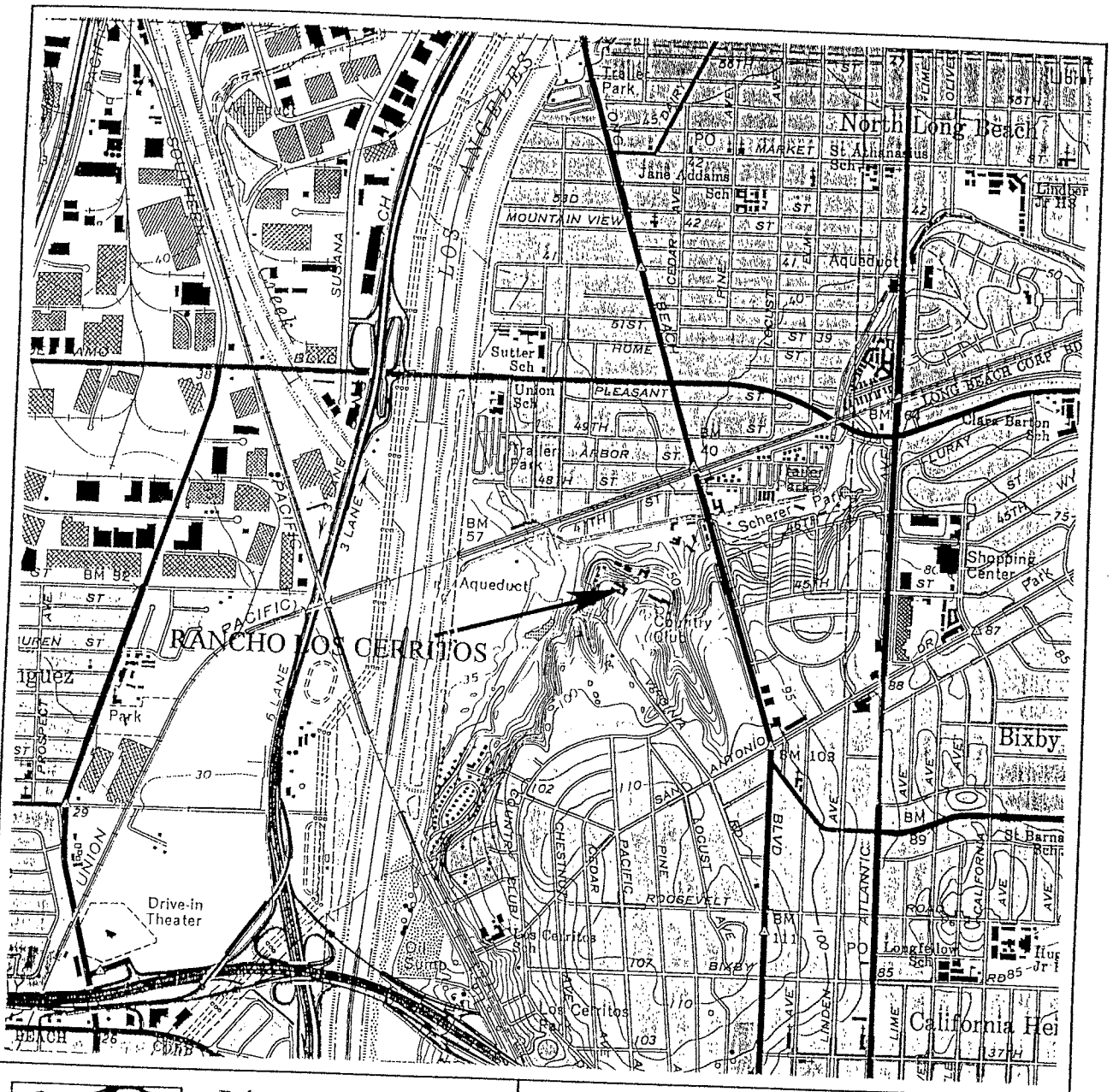
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Mission Viejo, CA 92691
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MAP 1: AREA MAP

Portion of USGS Long Beach, California Sheet, 1957, Revised 1978.

Scale 1:250,000
North is up.



Paleontology Archaeology History RMW Paleo Associates 23392 Madero, Suite L Mission Viejo, CA 92691 (714) 770-8042 FAX (714) 458-9058	**MAP 2: INDEX MAP** Portion of USGS Long Beach, California 7.5 Minute Quadrangle, 1964, Photorevised 1981. Scale 1:24,000 North is up.

Angeles River from emptying at Ballona Creek, far to the north, to the current channel. The bluff is the northern expression of a terrain feature that curves to the southeast, with its highest expression at Signal Hill, some seven kilometers distant. The bluff continues to the southeast, terminating near the ocean in the Seal Beach area. The area between the bluff and the Palos Verde Hills, some 12 kilometers to the west, can be thought of as the Los Angeles River delta. Undoubtedly, the river meandered across this area many times in the prehistoric past. A tributary stream draining much of the area behind the bluff joined the river immediately east of Rancho Los Cerritos.

The view from Rancho Los Cerritos cannot be appreciated today, given extensive planting of large, introduced trees in the area. Early pictures of the rancho vicinity indicate a sweeping view in virtually all directions. To summarize, the Rancho Los Cerritos area before development was an imposing position, well watered and near enough to the coast to benefit from the ocean's temperature mitigating effects. For these reasons, among others, the area was chosen for construction of the headquarters of a large ranching operation. The attractiveness of the area was not lost on earlier people. Kroeber (1925) indicates two place names near Rancho Los Cerritos, Tibaha and Ahau. Berner (1975) identifies an Indian Village named Tibahang-na as existing in the immediate area of Rancho Los Cerritos. Numerous prehistoric remains have been found on the Rancho Los Cerritos, including at least one cache of cogstones. Cogstones are artifacts from several thousand years Before the Common Era (B.C.E.), so it is obvious that indigenous people have used the area for a very long period of time.

The climate of the study area vicinity can be described as mild, uniform and semi arid. Temperatures rarely exceed 33 degrees Celsius or drop below five degrees Celsius. Rainfall occurs primarily between November and April, and averages between 25 and 40 centimeters per year. The current climatic conditions did not prevail during the entire span of time that man has been present in the area. Heusser (1978) suggests that pine forests may have occupied the coastal regions from roughly 10,000 to 6,000 B.C.E. The climate then became warmer and drier, resulting in replacement of the pine forests by oak woodland and grassland communities. Coastal sage scrub and chaparral communities became pronounced during the few centuries preceding the Common Era (C.E.).

Study area vegetation today consists almost entirely of introduced species, one result of the extensive urbanization. Numerous ecological communities were present in the Rancho Los Cerritos area during prehistoric and early historic times. These communities provided the entire resource base for the prehistoric population. The early historic people depended more on imported animals and plants, but still made extensive use of the local ecological communities. The following descriptions of the local natural ecological communities is provided in an attempt to create an understanding of area appearance near the end of the prehistoric era. The following descriptions are based on Drover and Koerper (1983).

Saltwater Estuary Community, Beach and Coastal Strand Community and Marine Community: These three communities provided fish, shellfish and marine mammals for the prehistoric and early historic populations. Waterfowl would also have been available. Seaweed may also have been collected and used as food or raw material. Naturally occurring petroleum, asphaltum, occasionally washed ashore and was collected for use as an adhesive. Estuary plants were extensively used for basketry, clothing, shelter and, quite probably, medicines.

Coastal regions were probably used by prehistoric people during the winter months as part of a seasonal round adaptation. Direct exploitation of the three communities by people residing near Rancho Los Cerritos would have been very easy, since the ocean is only about seven kilometers distant along very gentle routes of travel.

Riparian Woodland Community: This community develops along streams and around seeps and springs. Oaks, alders, willows, sycamores and cottonwoods are common trees and growth is usually quite dense. A large variety of herbs, grasses, cattails and berries grow in the riparian woodland community. Animals and birds were attracted by the water and the food resources offered by the vegetation. In short, the riparian woodland offered a great variety of easily exploited resources to the local people.

The riparian woodland community once existed along the Los Angeles River and its major tributaries. No extensive riparian growth can be seen in the area today, but it certainly dominated the stream areas in the Rancho Los Cerritos vicinity. These resources could have been quite easily accessed from the Rancho Los Cerritos area.

The riparian area would have represented a most important, easily accessed resource for the local prehistoric population and was probably also extensively used by early historic people.

Freshwater Marsh Community: Freshwater marshes developed at various times in the Los Angeles River delta area. Freshwater marshes resemble the riparian community in terms of the plants and animals they host, but may be surrounded by a greater extent of forest growth. Migratory fowl are attracted to freshwater marshes and would have been an abundant resource during particular seasons of the year.

Access to any local freshwater marshes would have been quite easy from the Rancho Los Cerritos area.

Grassland Herbland Community: This community would have existed in the broad plains and basin areas to the north and northeast of the study area, and probably in a major portion of the river delta area. The grassland herbland community contained a variety of resources. Seeds of the many annuals would have been the primary resource of interest to the local people, but blossoms, greens, fruits, bulbs, fleshy parts of prickly pear and occasional walnuts were also available, primarily during the spring. Animals included deer, rabbits, rodents, quail and various other birds. Historic people used the community for stock grazing as well as hunting and collecting.

Access to the grassland herbland community required only minor travel from the Rancho Los Cerritos area along gentle routes.

Oak Woodland: The oak woodland occurs in sheltered valleys where the soil is deep. Oak trees can grow to as much as 20 meters in height in such conditions, and are surrounded by grasses, herbs and forbs. Acorns were a primary food resource for the prehistoric inhabitants, at least during the latter part of the archaeological sequence. The acorns become available in the fall, thus providing a rich resource during the time of year when other plants are far past their peak availability. Stands of oaks probably grew in sheltered valleys in the Palos Verde Hills and perhaps along the slopes of the bluff extending southeast of Rancho Los Cerritos. Much larger stands were available in the mountains surrounding the Los Angeles Basin.

Access to the local oaks would have been quite easy, but the mountain oaks would have required a lengthy trek.

Coastal Sage Scrub Community: This community consists primarily of shrubs seldom exceeding a height of two meters. Various species of sage, buckwheat, some flowering plants and grasses form the primary vegetation. Seeds were the primary resource of the sage scrub, but edible stems, stalks, shoots, greens, roots, bulbs and some berries can also be found. Rabbits and rodents abound in the sage scrub. The sage scrub community was the primary native community along the bluff slopes and tops surrounding Rancho Los Cerritos.

Access would have presented no problem. The rancho is located within the community.

Chaparral Community: Chaparral is a dense brush normally found on rocky slopes, usually at slightly higher elevations than the oak woodland community. Manzanita, chamise, mountain mahogany, scrub oak and ceanothus are typical constituents. Seeds, berries, bulbs, shoots and roots are the primary utilitarian resources. The chaparral is a primary deer habitat (Moratto 1984). While some chaparral may have existed in the Palos Verde Hills, dense stands would only have been found in the mountainous areas surrounding the Los Angeles Basin.

Access to the chaparral from the Rancho Los Cerritos area would have required long travel through somewhat difficult terrain.

Cultural:

Ethnography: The study area lies in the prehistoric area of a Native American group known as the Gabrielino (Bean and Smith 1978, Kroeber 1925). The name "Gabrielino" denotes those people who were controlled by the Spanish from Mission San Gabriel. Therefore, the name does not identify a specific ethnic or tribal group. The names the Native Americans living in the study area used to identify themselves have, for the most part, been lost. The Rancho Los Cerritos area lies near the coastal center of the territory traditionally defined as belonging to the Gabrielino. Boundaries with other Native American groups lie considerable distances away. The Juaneño and Luiseño were located to the southeast, the Cahuilla were to the east, the Serrano to the northeast, the Tataviam to the north and the Chumash to the Northwest. The Gabrielino shared a common language heritage with all these groups, excepting only the Chumash. The Gabrielino controlled the Pacific Ocean beach from about Topanga Canyon on the north to Aliso Creek on the south. The southern Channel Islands were also under Gabrielino control and were reached by using ocean going plank canoes, part of a well developed maritime adaptation.

The Gabrielino language, as well as those of all of the surrounding groups mentioned above, excepting only the Chumash, was derived from the Takic family, part of the Uto-Aztecan linguistic stock. By contrast, the Chumash language, from the area north of the Gabrielino, is derived from Hokan stock of the Yuman language family, representing an origin quite different from that of the Gabrielino. The Chumash share this trait with groups located south of the Luiseño.

The Yuman family of languages is derived from the American southwest while the Takic family can be traced to the Great Basin area (Driver 1969). Linguistic analysis has established that the Hokan speakers of Ventura and San Diego Counties were separated some time after 500 B.C.E. The implication is that the entire southern California coastal region was once filled with Hokan speakers who were gradually separated and displaced by Takic speaking migrants from the Great Basin area.

The Gabrielino may have numbered as many as 5,000 people at their peak in the precontact period. However, population estimates are very difficult to make because many of the Indians did not come under Spanish control. Mission records are therefore most incomplete.

The center of the Gabrielino religion was Chinigchinich, the last of a series of heroic mythological figures. The Chinigchinich religion was apparently relatively new when the Spanish arrived, and was spreading to nearby groups. Relatively little is known concerning religious practices, but an enclosure containing a representation of Chinigchinich was found in each of the larger villages. The worship of Chinigchinich was closely tied to the toloache cult where rituals included the ingestion of extracts from the datura plant, a hallucinogen.

Girls were the subject of an initiation ceremony around the age of puberty. It is unknown whether boys had a similar ceremony. Marriages were the occasion for elaborate ceremonies, but little is known concerning actual practices.

The Gabrielino traced their descent through the male line, with status being determined by both wealth and heredity. Each lineage had a leader (chief), whose authority rested in possession of a "sacred bundle." The chief had several assistants to help him with his many duties, including the collection of taxes (gifts from the people, primarily for consumption by guests), leading war parties, concluding treaties and seeing to community welfare. Subject to approval of the people,

the position of chief was hereditary within the male line, though females could serve if no male heir was available. Shamans were also people of power, whose primary responsibilities were the overseeing of the various rituals.

The mainland Gabrielino practiced cremation of the dead, cremation usually occurring about three days after death. Most possessions of the deceased were also burned, though some were kept to be burned at the annual mourning ceremony, an eight day event in the fall of the year.

Prehistoric Era: The archaeological heritage of California is quite rich, perhaps more so than any other North American region north of Mexico. However, the archaeology of California is not very well known. The California Native Americans were generally quite peaceful and did not often offer warlike resistance to European settlement. Consequently, they did not gain any great notoriety during the settlement period. Also, the original Californians, especially those within the coastal regions, were first under the control of the Spanish and Mexican governments and only later, after most of their culture had been destroyed by disease and displacement, did they come under the control of the United States. There was only a minor Native American presence remaining in California when it became a United States possession and massive development began. Consequently, very little interest in the natives and their prehistory was generated. It was many years later before the size, complexity and extent of archaeological deposits in the state became apparent.

Two major works attempting to describe California archaeology have appeared in recent years. These are the works of Chartkoff and Chartkoff (1984) and Moratto (1984). The following discussion is based on these two references, as well as others cited.

A long standing tenet of New World archaeology has been that man did not arrive in the western hemisphere until about 10,000 to 11,000 years B.C.E. Some researchers have argued for earlier dates of entry, but the evidence is not conclusive and has not been accepted by most archaeologists. Until recently, it was claimed that early sites lacked definitive dates. The situation is now beginning to change as a result of studies in other disciplines as well as recent archaeological studies. Mitochondrial DNA studies of contemporary Native American populations completed at Emory University and elsewhere suggest New World entry between

21,000 and 42,000 years ago (Metzler 1993). An example of an archaeological site with older dates is the Monte Verde site in Chile, confidently dated to 12,250 years ago. Coupled with the span of time required for dispersal from the Bering Strait area to southern Chile, it is obvious that New World arrival had to occur long before the generally accepted dates. The Meadowcroft Rockshelter in Pennsylvania has also been dated to about the same period as the Monte Verde site (Dixon 1993).

Most of the very few remains from the earliest period usually indicate a very small, mobile population, apparently dependent on hunting of large game animals as the primary subsistence strategy. Other resources were certainly used, but the bulk of the few traces remaining today are related to game hunting. Sites like Monte Verde and Meadowcroft Rockshelter are beginning to change this view. A rather sedentary population exploiting a wider range of resources is indicated at both sites.

The Chartkoffs identify the earliest portion of the archaeological sequence, to about 9,000 B.C.E., as the Paleo-Indian Period. No Paleo-Indian Period sites are known in the vicinity of the study area. This may be due to destruction of the sites by later human activity, or perhaps the Paleo-Indians simply did not utilize the local region.

With few exceptions, lithic artifacts are the only surviving material from the Paleo-Indian Period. These consist primarily of large and extremely well made projectile points and large but cruder tools such as scrapers and choppers. Encampments were sited near a major kill. Occupation would have lasted only until the resources of that kill were exhausted. Such an economy, using only a small fraction of the available resources, would not have supported a large population. It is probable that the Paleo-Indians lived in groups no larger than extended families and that contact with other such groups was infrequent. As mentioned earlier, recent work is beginning to indicate that at least portions of the Paleo-Indian population exploited a larger resource base and were more sedentary.

The earliest extensive human remains in the study area vicinity are today identified as the San Dieguito culture. The Chartkoffs refer to the appearance of the San Dieguito as the beginning of the Archaic Period. The San Dieguito type site is CA-SDI-149, located far to the southeast of the current study area in the floodplain of the San Dieguito River. The San Dieguito

component of CA-SDI-149 is in excess of two meters below the surface. Radiocarbon dates from the San Dieguito levels of CA-SDI-149 indicate occupation around 7,000 to 6,500 B.C.E. Artifacts from the San Dieguito component included two forms of leaf shaped knives, foliate to ovoid bifaces that may be knife blanks, foliate and short bladed shouldered points, a crescent, engraving tools, choppers, core hammers, pebble hammerstones, cores and a variety of scraper types. The collection argues that hunting was a major subsistence activity. Many of the tools can be interpreted as those necessary for the exploitation of wood and fibers for use as clothing, shelter and similar utilitarian objects.

SDM-W-49, located near the Batiquitos Lagoon in San Diego County, far southeast of the current study area, also contained a San Dieguito component. The San Dieguito component at SDM-W-49 was encountered at depths of 50 to 140 centimeters and was dated to about 6,300 to 6,000 B.C.E. The tools recovered are similar in most respects to those from CA-SDI-149. However, the people at SDM-W-49 also relied heavily on marine resources, especially shellfish. Large pecten was apparently the preferred shellfish during San Dieguito times.

In summary, the San Dieguito people gained their subsistence primarily from the plants and animals associated with the chaparral ecological community and from coastal marine resources. They did not, however, take advantage of the hard seeds associated with the chaparral. Hunting played a major subsistence role, but the target animals were smaller and more plentiful in a given area in comparison to the earlier, larger animals associated with the Pleistocene. The distinctive artifacts from the San Dieguito are large, rather crude projectile points, scrapers and choppers; crescent shaped objects of uncertain utility and other tools such as gravers. Bone awls appear near the end of the Early Archaic, perhaps indicating that basketry was then being produced.

By the Middle Archaic, 6,000 to about 4,000 B.C.E., the Native Americans had learned to take advantage of the hard seed resources of the coastal sage scrub and chaparral ecological communities. The tools used for processing the hard seeds, manos and metates, appear in large numbers for the first time. They are the hallmarks of the Encinitas Tradition. Large shell mounds in the coastal regions are frequently traced to the Encinitas. The Encinitas persisted in essentially unchanged form until the close of the Late Archaic, around 2,000 B.C.E. Local minor differences

in traits are apparent during the Encinitas, and these have led to the identification of several sub groups within the Encinitas. In Los Angeles County, in the area which would later be identified as Gabrielino territory, the sub group is known as the Milling Stone Horizon. The Milling Stone people produced the cogstones recovered during the 1930s at Rancho Los Cerritos.

The minor differences between the Milling Stone and surrounding cultures were probably the result of increasing isolation. The total population was larger, as were the groups in which people lived. However, the strategy of utilizing hard seeds and ocean resources meant that a given group could follow the same general route from year to year as resources in different areas ripened and became available. This led to increased isolation from nearby groups and eventually to noticeable differences in artifact typology. It is worthwhile to note that the Encinitas people were the first to colonize the Channel Islands in large numbers.

A long standing tenet of local archaeological thought is that people of the Milling Stone period practiced a seasonal round of resource exploitation. In this view, the people would winter along the coast utilizing primarily marine resources. In the spring, a move would be made to inland camps to take advantage of the ripening vegetable resources. Perhaps several moves would be made as the year progressed, until autumn camps in the foothill or mountain areas were occupied. The people would return to the coast with the onset of a new winter season. There are few actual points of evidence to support this theory, since there are few available indicators of seasonality. It is very difficult to establish that a given encampment was used only during a particular season. Recently, several large, complex sites of Milling Stone age have been discovered in the first range of foothills separating the basin area from the surrounding mountains. These site areas all lie roughly half the distance between the coast and the highest elevations of the surrounding hills. It is quite possible that these camps were occupied on a year round basis, with exploitation of the resources being accomplished by small parties spending a few days away from the main camp.

The vast bulk of Milling Stone age artifacts are tools related to the procurement and processing of food resources. Decorative items and, with a few notable exceptions, objects of ritual are rare. Milling Stone people are accordingly often seen as rather primitive, with most activities directed toward mere survival. This view is also beginning to change as a result of

recent discoveries. For example, a recently described Milling Stone age site near Lake Forest in southern Orange County was apparently a ceremonial area that required large expenditures of time and resources to construct and maintain (Bissell 1994). Such sites establish that Milling Stone people could accumulate the resource reserves to allow a great deal of time and effort to be spent on activities not related to survival, and that they had well developed religious beliefs. In other words, Milling Stone people were far more advanced than is generally thought.

The Pacific Period began around 2,000 B.C.E. and persisted until Spanish contact. During the Early Pacific, persisting until about C.E. 500, the local Tradition is known as the Campbell. The major difference between the Campbell and earlier Traditions was the introduction of the mortar and pestle, a tool technology allowing the exploitation of the acorn as a food resource. Evidence of trade is pronounced during the Campbell. Steatite from the Channel Islands and obsidian from areas far inland are found in most sites.

The Late Prehistoric (or Shoshonean) Tradition began in the years around C.E. 500 and lasted until Spanish contact. The Late Prehistoric is marked by large populations, with some coastal camps containing as many as 1,500 persons. Apparently, many of these settlements were permanent, in the sense that they were occupied throughout the year rather than seasonally. Art flourished during this time and many striking objects of stone, bone, wood and shell were manufactured.

It will be recalled that during Late Prehistoric time migrants from the Great Basin appeared in the Los Angeles and Orange County area. Apparently, these people were very quick to adopt most of the local traits, for it is difficult to separate the migrant deposits from those of the indigenous people on the basis of artifact typology alone.

The Moratto and Chartkoff chronologies are not the only ones in use and, in fact, are somewhat generalized since the work addresses the entire state of California. The latest chronology to appear which has gained local acceptance is that of Koerper and Drover (1983). The Koerper and Drover chronology is based on extensive work at CA-ORA-119-A, a large multi-component site near the University of California, Irvine campus. CA-ORA-119-A contained evidence from very early times to the historic period. A summary of the Koerper and Drover chronology is given in Table 2 on the following pages.

Table 2: CHRONOLOGY, BASED ON KOERPER AND DROVER (1983)		
PERIOD	**TEMPORAL SPAN**	**MAJOR DIAGNOSTIC TRAITS**
Early Man or Paleo-Indian	? to 7500 B.C.E.+/- ?	Lack of grinding implements.
		Large, well made projectile points.
Characteristics and adaptations:	*Subsistence through hunting of large Pleistocene game animals.*	
	Temporary camps at large kills.	
	Group no larger than extended family.	
	Widespread. Covered most of North American continent, but no sites known locally.	
	Very small total population.	
Milling Stone or Encinitas	7500 B.C.E. +/-? to 1000 B.C.E. +/- 250	Predominance of manos and metates.
		Ornaments made of stone.
		Large and often crude projectile points.
		Cogstones and discoidals.
		Charmstones.
		Some mortars and pestles near end of period.
Characteristics and adaptations:	*Heavy reliance on hunting in early part of period. Deer, rabbits and other small game associated with chaparral.*	
	In middle to late part of period reliance was on hard seeds associated with chaparral.	
	Coastal groups utilized shellfish and near shore resources.	
	Seasonal round based on ripening vegetable resources rather than animal migrations. Caused increased isolation leading to noticeable differences in culture in much smaller geographic areas.	
	Probably about 50 persons in average group.	
	Very little noticeable change in last two thirds of period.	
	Colonization of Channel Islands near end of period.	

Table 2 Continued: CHRONOLOGY, BASED ON KOERPER AND DROVER (1983)		
PERIOD*	**TEMPORAL SPAN**	**MAJOR DIAGNOSTIC TRAITS**
Intermediate or Campbell	1000 B.C.E. +/- 250 to C.E. 750+/- 250	Bone ornaments.
		Wide use of mortars and pestles along with manos and metates.
		Use of steatite begins.
		Many discoidals.
		Large projectile points trending to smaller in the last part of the period.
Characteristics and adaptations:	*Heavy reliance on acorns as food resource. Hard seeds, small animals and coastal resources continue to be used.*	
	Many more deep water ocean resources utilized.	
	First permanently occupied villages.	
	Large increases in local population.	
	Atlatl (spear thrower) in use. Bow and arrow probably introduced near end of period.	
	Some evidence of trade.	
Late Prehistoric or Shoshonean	C.E. 750 +/- 250 to Spanish contact	Shell ornaments.
		Mortar, pestle, mano and metate use continues.
		Small, finely worked projectile points.
		Wide use of steatite.
		Some pottery vessels appear near the end of the period.
Characteristics and adaptations:	*Increased exploitation of all resources.*	
	Large populations, some villages had as many as 1,500 persons.	
	Great increase in art objects.	
	Much evidence of trade.	
*Both the Chartkoff and Koerper and Drover names are given for the various periods, with the Koerper and Drover names appearing first.		

Historic Era: The first known Europeans to see what would become Los Angeles were members of the 1542 expedition of Juan Rodriguez Cabrillo. Cabrillo sailed along the coast and did not explore inland. Europeans did not return to the Los Angeles area until 1769 when Gaspar de Portola led an overland expedition from San Diego to Monterey. This expedition of 63 persons passed through the local area far to the northeast of Rancho Los Cerritos during late July 1769.

Mission San Gabriel Arcangel was established in 1771 and Mission San Juan Capistrano became active in 1776. The missions were charged with administering to the Indians in the local area. Mission life did give the Indians some skills needed to survive in their rapidly changing world, but native populations were decimated by diseases for which they had no immunity. After 1810, mission population declined faster than it could be replenished. The Mexican Revolution, beginning in 1821, overthrew Spanish control and the new Mexican government had a very different outlook on mission activities, in comparison to the earlier Spanish administration. Secularization of the missions, planned under the Spanish, was greatly accelerated by the Mexican government. Plans to provide land, training and living quarters for the Indians never developed and the mission lands were soon in the hands of a relatively few influential Mexican families. At best, the Indians could work as hands on these large ranchos. The decline continued until few Gabrielino remained.

In November 1784, the Spanish Governor of Mexico, Pedro Fages, granted use of a large tract of land to Manuel Nieto. A second portion, that included the land on which the Rancho Los Cerritos would be built, was received in 1790. This grant brought Nieto's holdings to approximately 300,000 acres. The land was loosely described as between the San Gabriel and Santa Ana Rivers, and extending from the southern boundary of Mission San Gabriel to the ocean. In 1795-96, Nieto's lands were reduced to approximately 167,000 acres, because they encroached on Mission San Gabriel lands. Though often described as land grants, McPherson (1988) argues that policies of the period actually gave rights to occupy and use the land, but stopped short of granting ownership. The right to use the land was a reward for Nieto's long period of military service.

Nieto died in 1804 and the property was shared by his heirs. The portion of the property containing Rancho Los Cerritos was given to Manuela Nieto de Cota, Nieto's only surviving

daughter. A formal partition was not permitted until 1834, when Manuela received title to her portion of the property. Manuela's husband, Guillermo Cota, stated in petitions his intentions to improve the property. Cota had a distinguished career, serving as a Commissioner of the Pueblo de Los Angeles from 1810 to 1817 and again from 1822 to 1825. He also served as Mayor in 1827 and 1829.

The Cotas constructed two adobe houses in the vicinity of the current Rancho Los Cerritos buildings, but very little is known about them. Decades later, one of the houses, then abandoned, was referred to as the Flea House. Berner (1975) describes the Flea House as located at, "...the site of the eleventh fairway on the grounds of the Virginia Country Club." Nevertheless, a map in the same reference depicts the Flea House as located a short distance to the northwest of the extant structure, in an area currently covered by residential construction. Sanchez and Allen (1987) confirm that the structure was probably to the west. In any event, no trace of either of these earlier structures remains.

Jonathan Temple, a native of Reading, Massachusetts, arrived in southern California in 1826. Temple became a Mexican citizen and joined the Catholic church, taking the name Juan Bautista. He operated a merchandising establishment in Los Angeles, and in 1830 married Rafaela Cota, a second cousin of Guillermo Cota. In December 1843, Temple purchased the Rancho Los Cerritos for $3,025.00.

Temple was an excellent businessman and was involved in many civic undertakings. He operated one of the first stores in Los Angeles, was instrumental in starting the first library, and constructed the first courthouse. He held several civic positions, including that of Alcalde during the Mexican-American War crisis. He rapidly developed Rancho Los Cerritos. By 1852 the ranch had 15,000 cattle, 3,000 horses and 7,000 sheep, with as many as 3,500 calves being branded each year. By this time, Temple was the wealthiest man in the Los Angeles area with assessments totaling $108,000.00 (Berner 1975).

Temple began construction of the existing Rancho Los Cerritos adobe in 1844. The house and two wings were constructed at this time. The wings were both extended to the west a few years later, perhaps as early as 1847 or 1848. The extension of the two wings is detectable today in the form of architectural details concerning wall ties and construction methods. As originally

constructed, the house was approximately 100 feet in length and the wings extended 70 feet to the west. The extension of the wings added approximately 90 feet to each.

Temple petitioned the United States Land Commission following the Mexican-American War, and his ownership of Rancho Los Cerritos was confirmed in 1853. The following year the Land Commission reversed itself and it was not until 1856 that Temple received clear title to the land. In 1866, with the cattle industry in decline and desiring to join his daughter in Paris, France, Temple sold Rancho Los Cerritos to Flint, Bixby & Company for $20,000.00.

Cousins Thomas and Benjamen Flint and Lewellyn Bixby, had developed a successful sheep ranching operation in central California beginning in 1854. Jotham Bixby, one of Lewellyn's younger brothers, was asked to manage Rancho Los Cerritos and promptly settled with his family in the adobe. A successful sheep ranching operation was developed, with as many as 30,000 head grazing on the rancho. The installation of numerous wells and windmills alleviated the problems caused by the periodic droughts. The economy was changing rapidly during Jotham Bixby's tenure at Rancho Los Cerritos. Beginning in the late 1870s, sheep ranching became less important and much of the rancho was leased for dairy and farming operations. Many parcels of the land were sold, but some 3,500 acres remained when Bixby died in 1917. The Bixby family did not retain residence at Rancho Los Cerritos during this entire period, moving to Los Angeles in 1881 and subsequently to the new town of Long Beach in 1885. The adobe then was occupied by renters until it and the surrounding five acres were purchased in 1930 by Llewellyn Bixby, Sr., son of one of the original founders of Flint, Bixby & Company.

Llewellyn Bixby, Sr. modernized the adobe. Various internal changes were made to create more useful living space, the current tile roof was added, as was the current sunporch and courtyard improvements. Electricity, plumbing, eleven furnaces, telephone service, an intercom system and four fireplaces were added. At least one cache of cogstones (Milling Stone age artifacts) were found during excavations for the floor furnaces. Concrete slabs were laid in the rooms, with wooden floors installed over them in all areas. Llewellyn Bixby, Sr. died in 1942, but his family continued to live at Rancho Los Cerritos, on and off, until 1954. Through both family and community efforts to preserve Rancho Los Cerritos, the City of Long Beach acquired the site in 1955 for use as a public museum, library and park.

Of particular importance to this study is the manner in which the original roof was constructed. Berner (1975), paraphrasing from Smith (1931:62-63) offers the following description:

> The original roof was the typical "California" roof. A first layer of planks were (sic) covered with a second layer of sand and gravel. Over all this was spread hot brea (asphaltum) from the open beds west of early day Los Angeles, known then as now as the La Brea Tar Pits. Under the hot summer sun, the brea would soften and expand, sometimes running down the sides of the building. In the winter it would shrink during the cold weather, and the rains brought many leaks. Jotham Bixby, the next resident, soon had a Yankee-style roof put on, and the present tile roof was put on when the house was restored in 1930.

The construction of the building foundation is also of interest to this study. Berner (1975), once again paraphrasing from Smith (1931:62), states, "The foundation was fired brick from the east coast, and these bricks were also used in paving the veranda or porch at the back of the house, which faced the family garden." Notwithstanding, archaeological excavations by Greenwood (1987) and the current study established that the building has no foundation other than adobe bricks placed directly on native soil.

Also of interest to this study is the fact that the concrete floor in the Foreman's Room (Room 101) was removed to repair a plumbing leak. The concrete floor was not replaced in order to create an appearance more like that of the nineteenth century.

The information contained in the above narrative, except where otherwise cited, was provided by staff members Ellen Calomiris and Steve Iverson of the Rancho Los Cerritos, the Rancho Los Cerritos Docent Training Manual and the Historic Structure Report by Gilbert Arnold Sanchez. Both the manual and the report are on file at the Rancho Los Cerritos.

RESEARCH DESIGN

Theoretical Basis: The scope of the current investigation was limited to those areas that would be disturbed by the seismic upgrade. These areas were along the west interior walls of the western rooms of both wings (Rooms 101 & 130), on the interior of room 127, adjacent to the Visitor Center (1930 garage area), and the footing area of the courtyard wall. Excavations were completed in these four discreet areas as a means of determining if they contained in situ deposits

important to our understanding of area prehistory and history. The investigation consisted of obtaining a controlled sample from each of the four areas listed, evaluation of the sample and monitoring of the further excavation completed for footings.

Previous Research: Apparently, archaeological investigations have been active in the Rancho Los Cerritos area since 1878, when Schumacher completed work in the vicinity. No comprehensive report of this work can be found.

Four discoidals and seven cogstones were recovered from excavations in 1930 for installation of furnaces and plumbing. Unfortunately, the exact location of recovery is not known, but it was within the confines of the building and courtyard.

Beginning in the 1950s, Evans completed numerous excavations on the Rancho Los Cerritos property, but comprehensive reports of this work have not appeared, and the collections are not available for review (Greenwood 1987, Calomiris 1996). Apparently, the most intensively studied area Evans excavated is located about 20 meters west southwest of the adobe building. Evans interpreted the area as an adobe borrow pit subsequently filled with trash. The deposit is described as stratified. The area today lies mostly in a landscaped area between a driveway and a parking lot. It is known that the deposit extends some distance into the parking lot, since excavations for installation of a water line yielded cultural material.

Greenwood (1987) completed three excavation units at Rancho Los Cerritos. These excavations were designed to gain knowledge of the wall and foundation architecture of the adobe structure. One of Greenwood's units was placed in the northeast corner of the Foreman's Room (Room 101). Excavations completed for the current project were also in this room, but along the western wall. Greenwood's other units were placed in the north wing, east of where excavations for the current project were made, and in the main house. Greenwood's major observations relative to this study are:

1. No foundation exists at Rancho Los Cerritos. The lower courses of adobe brick were laid directly on native soils, apparently with little or no preparation.
2. A scattering of historic and prehistoric material was encountered in all units. Much of the floor material (below the modern floors) was fill, imported from

somewhere in the immediate vicinity.

Greenwood's project was very limited in scope, and was designed to answer very limited and specific questions. A formal research design was not developed, but three research questions were formulated:

1. Can original architectural features be revealed archaeologically?
2. Can artifact or feature patterns reveal functional divisions of the interior space?
3. Does the demonstrated or potential significance of the resources confirm the eligibility of the structure to the National Register of Historic Places?

Current Study: The current project was also strictly limited in scope. Where Greenwood was limited to three discreet excavation areas, the current project was permitted four. No disturbance other than the excavation units themselves took place during the Greenwood study, but the excavation units of the current study were expanded to provide for footing construction. The project was designed to determine if important in situ archaeological deposits existed in any of the areas where footings were to be constructed. If important deposits were discovered, they were to be subjected to a data recovery excavation before excavation for the footings could occur. No data recovery excavations were undertaken, since no important in situ deposits were encountered.

The three room interiors that were excavated during the current project were known to be disturbed. The floors had been leveled by the original occupants and it was known that concrete floors had been added during the 1930 modernization. The excavations under the courtyard wall were a different matter, since the southern portion of the west wall had been in place since the mid 1840s, thus preserving the underlying material. It is known that a prehistoric site is in the vicinity, and the area under the wall was seen as the best opportunity to establish whether undisturbed prehistoric deposits are present in the area.

The Greenwood research questions were valid for the current study, thus they were included in the list of hypotheses. Additional hypotheses were formulated to more fully guide the current study.

Hypotheses:

1. Original architectural features will be revealed during the excavations.
2. Artifact or feature patterns will reveal functional divisions of the interior space.

3. In situ historic deposits will be encountered in the rooms where excavations are to be made. Such deposits will be important.
4. In situ prehistoric deposits will be encountered in the rooms where excavations are to be made. Such deposits will be important.
5. In situ historic deposits will not be encountered in the excavations under the courtyard wall.
6. In situ prehistoric deposits will be encountered in the excavations under the courtyard wall. Such deposits will be important.
7. The study will confirm the worthiness of the structure for listing as a National Register of Historic Places property.

METHODOLOGY

Excavations for the Rancho Los Cerritos project were confined to four discreet areas, three of which were within rooms at the west end of the adobe wings. The fourth area was at the footing of the replacement courtyard wall. Excavations were first completed in the west room of the southern wing, also known as the Foreman's Room (Room 101). As was noted earlier, the concrete floor had been removed in this room, so excavation could begin immediately. Demolition had to be completed before excavation could begin in the other three areas. The project specifications limited excavations to one cubic yard of material from each of the four areas.

To make the most of the limited excavation allowed in the Foreman's Room (Room 101), four units measuring 50 centimeters on a side were laid out parallel to the west wall and about 30 centimeters from it. Three of these units were then excavated. In the upper part of the units, material was removed by stratigraphy. While the number varied from unit to unit, about six stratigraphic levels could be detected in the first 30 centimeters of excavation. At the time, these were interpreted as living floors, but later evidence established otherwise (see discussion section). Below 30 centimeters excavation was continued in arbitrary levels of 10 centimeters each.

Excavated material was placed in buckets and carried to a screening area outside the building. The screening area was placed on a portion of the asphalt covered parking area in order

to prevent damage to archaeologically sensitive soils. Screening was accomplished by passing the material through 1/8 metal hardware mesh. All artifacts, ecofacts and appropriate samples of soils and "floors" from each level were bagged and labeled with identifying information. A level report form was completed by the excavator for each stratigraphic and arbitrary level of each unit. Wall profile drawings were prepared of each unit. Photographs were made of appropriate details of each units.

The fourth unit excavated in the Foreman's Room (Room 101) was relocated to be placed immediately adjacent to one of the other units. This was done to allow deeper excavation than was possible in a 50 by 50 centimeter unit.

Units one meter by 50 centimeters were excavated in the other three excavation areas. No definite stratigraphy could be detected in the courtyard wall area, so excavation proceeded in arbitrary levels of 10 centimeters. Some stratigraphy was evident in the Milk Room (Rooms127-130) excavations, but was not as clear as in the Foreman's Room (Room 101). Excavations in the Milk Room (Rooms127-130) followed the stratigraphy in the upper levels, but lower levels were excavated in arbitrary 10 centimeter increments. In all other respects, the methodology matched that used for the Foreman's Room work.

Once the controlled excavations were complete, mass hand and machine excavation was used by the construction crews to remove the balance of the soil from the footing areas. All of the excavation activity was monitored by an archaeologist. In all cases the removed soil remained in the project vicinity and could be examined in detail. All cultural material, with the exception of obviously modern debris, was collected, bagged and identified for provenience.

All collected material was removed to the RMW Paleo Associates laboratory for cleaning and processing. All material was lightly washed, dried, sorted by type and provenience and was described. All data was entered into catalog worksheets, which formed the basis for a computer data base. The resulting catalog of material collected is contained in Appendix B.

FINDINGS

Introduction: The locations of all excavation units and the areas monitored during demolition are depicted in the plans on the following two pages. The drawing on the third following page is

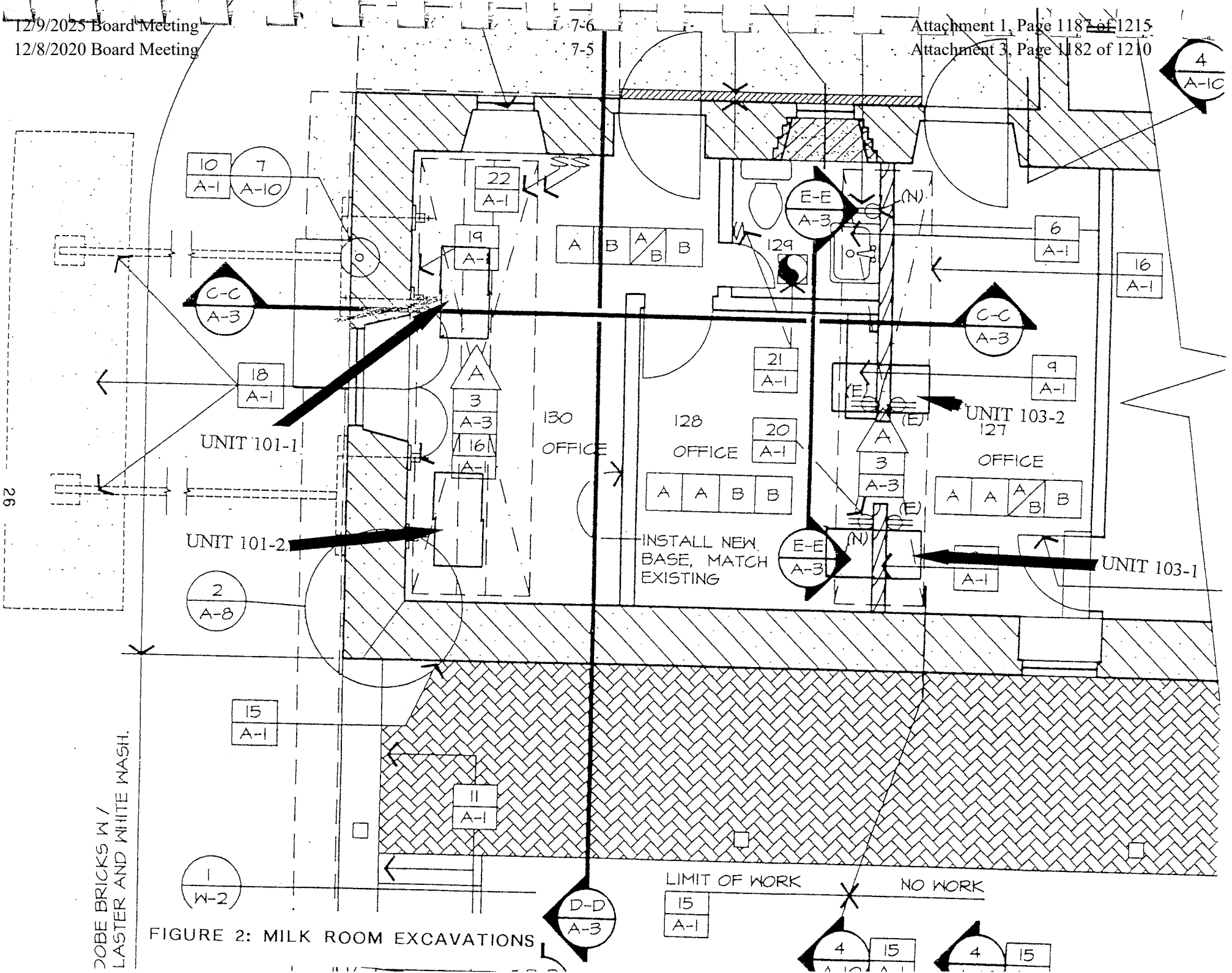


FIGURE 2: MILK ROOM EXCAVATIONS

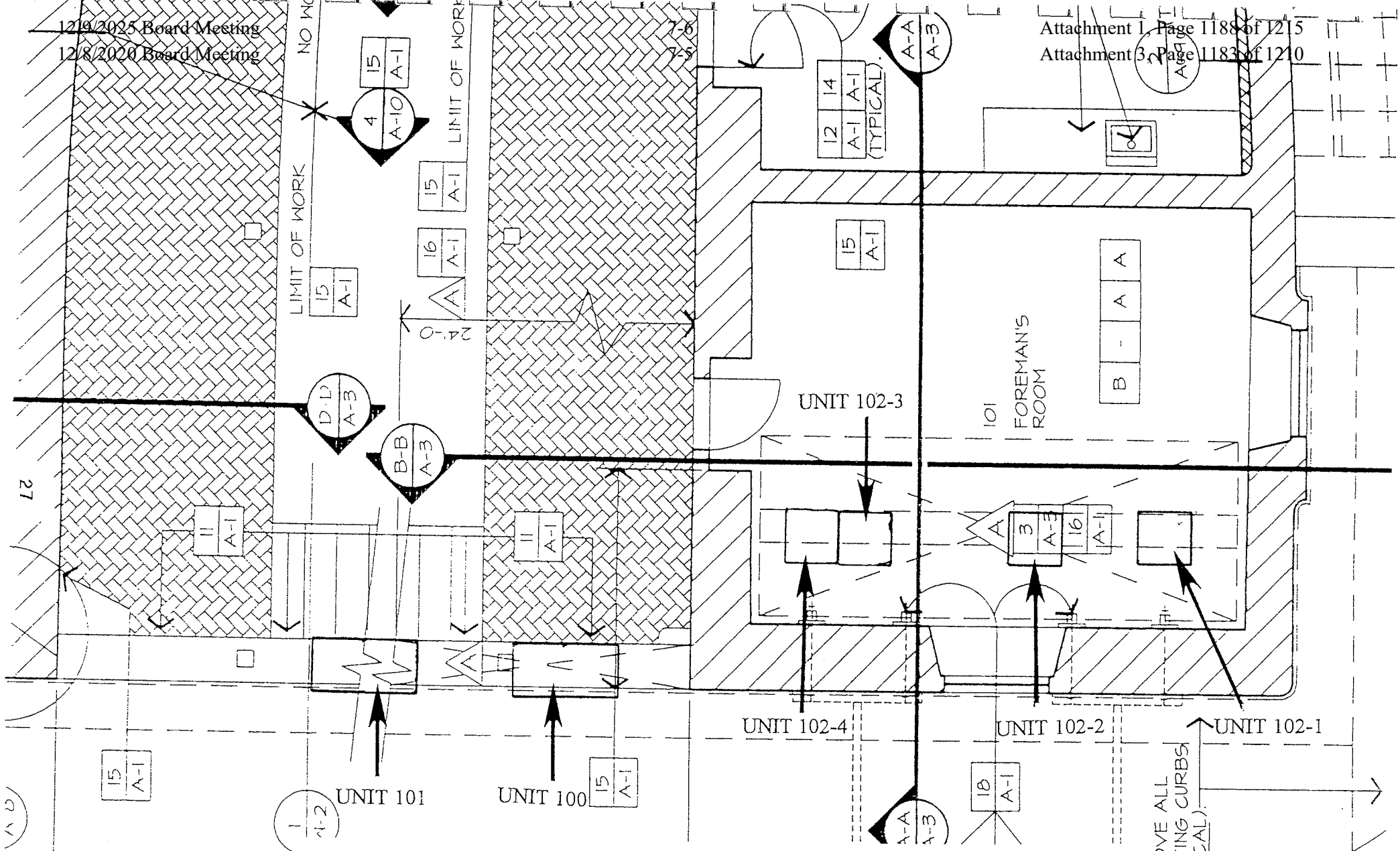
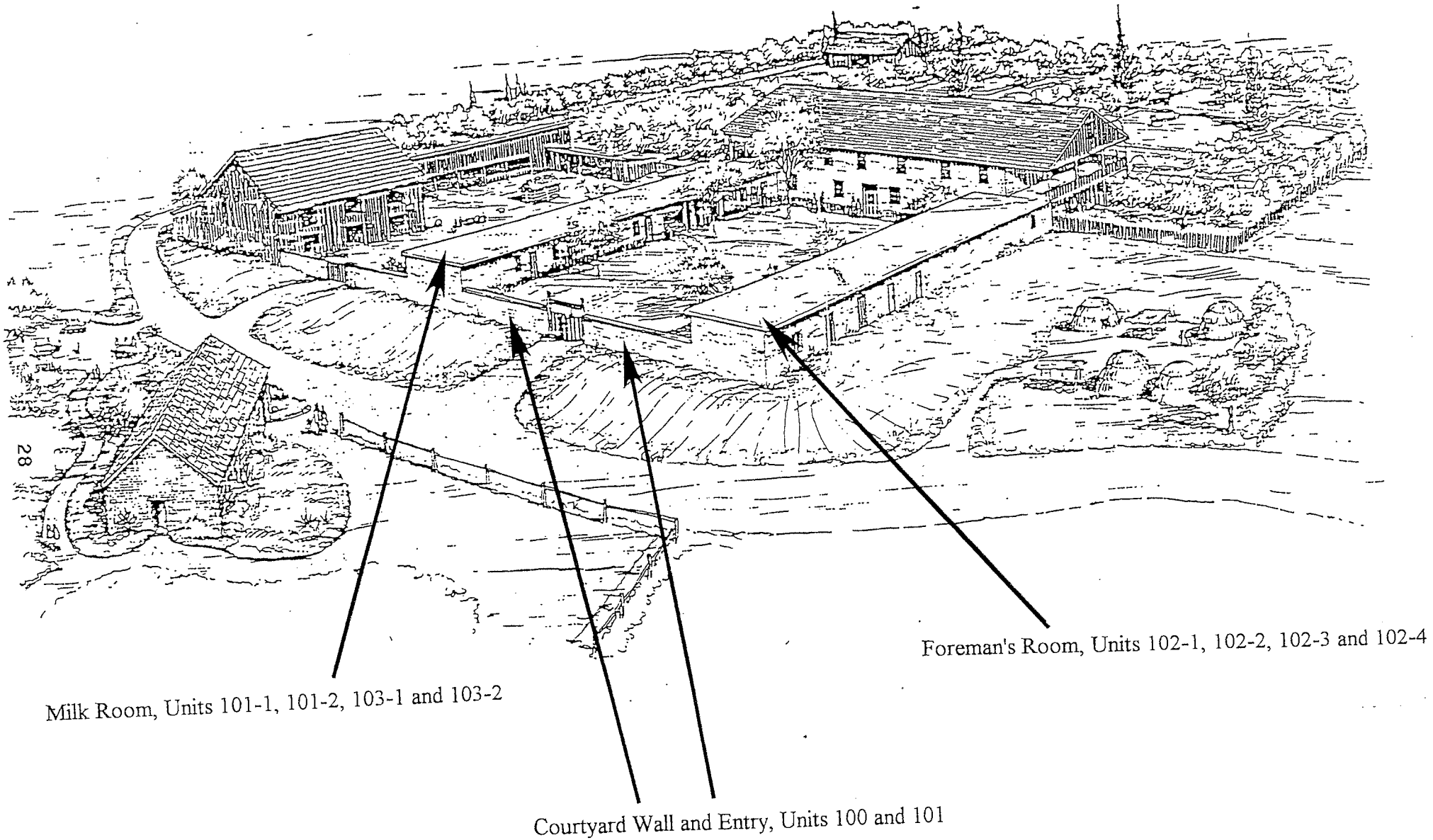


FIGURE 3: FOREMAN'S ROOM AND COURTYARD WALL EXCAVATIONS

FIGURE 4: RANCHO LOS CERRITOS AS IT APPEARED IN THE 1870S



provided to assist in visualization of the area of work and its relationship to the balance of the property. It is reproduced from the Rancho Los Cerritos Docent Training Manual and depicts the property as it appeared in the 1870s. The drawing is originally from the Historic Structure Report by Sanchez (1987).

Bone and shell material recovered during the excavations were analyzed by Joan Brown, RMW Palco Associates. Her full comments are contained in Appendix C and will be referenced as appropriate in the following discussion.

A single prehistoric potsherd was recovered during the monitoring work at Rancho Los Cerritos. The sherd was found inside a fragment of adobe brick. The sherd was analyzed by Sue Wade, Cultural Resources Management. Wade's full report appears at Appendix D, and will be referenced in the following discussion.

Excavation Unit Descriptions:

Units 100 and 101: These two units were placed in the area beneath the courtyard wall after demolition of the wall. Both units were placed in areas where the footing for the new wall was to be excavated. The units were 100 by 50 centimeters in size. The units were seen as vital to an understanding of prehistoric deposition in the vicinity of the western end of the courtyard. The wall had probably been constructed as early as 1847 or 1848 and the base of the wall had since remained in place, protecting the underlying soils and whatever cultural material they contained. Observations during wall demolition confirmed that while the upper portion of the wall was repaired with brick from the 1930 modernization, most of the wall was adobe brick sitting directly on native soils.

Full details regarding the recovery from Units 100 and 101 are contained in the catalog in Appendix B. Both units were excavated to depths of 70 centimeters with a central posthole extending to about 130 centimeters.

Both units contained very little cultural material, but the distribution pattern was interesting. Historic material was found only in the upper levels. Unit 100 yielded two fragments of brick and one fragment of milled wood in the upper 20 centimeters. Unit 101 had only a fragment of plaster and a fragment of wire mesh in the upper 20 centimeters. No definite historic material was found below 20 centimeters. Admittedly, some of the sparse bone and shell could

have been from the historic era, but this is unlikely. The little definite historic material that was present was probably introduced during the demolition of the wall.

A few prehistoric items were found in the two units. Unit 100 had a fragment of a bone tool in the 30 to 40 centimeter level. Two secondary flakes, one chert and one metavolcanic, were recovered from the 40 to 50 centimeter level of Unit 101. The soil in the two units was uniform and dark throughout the depth.

Units 101-1 and 101-2: These two units were placed in the west room of the north wing, a room commonly referred to as the Milk Room (Rooms 127-130) and currently used as staff offices. This room was actually the Milk Room in the nineteenth century, and after 1930 it became the gardener's and chauffeur's areas. Both units were 100 by 50 centimeters in size. The units were placed about 20 centimeters from the west wall. Unit 101-1 was excavated to a depth of 110 centimeters, while Unit 101-2 was abandoned at 90 centimeters. These depths far exceeded the depths to which the lower courses of adobe brick extended. Unit 101-2 was later extended to the west to expose the wall and permit documentation of construction details in that area.

A concrete floor was in place in the Milk Room (Rooms 127-130) at the beginning of the project. Demolition disclosed that the floor was actually two pours of concrete, both finished, separated by a black waterproofing compound. This observation assisted greatly in understanding material collected in the Foreman's Room (Room 101), and will be discussed later. An example of the concrete and waterproofing was collected and has been assigned Catalog Number 1130.

In contrast to the units at the courtyard wall, the units in the Milk Room (Rooms 127-130) were relatively rich in historic material. The historic material, including ceramic sherds, glass shards, metal fragments, nail fragments, brick fragments and similar material, was scattered throughout the units. Brick, not known to have been widely used in this part of the rancho prior to the 1930 modernization, was found in the deepest levels of the units, indicating extensive disturbance during the 1930 work. Numerous large bones were found in the two units. A few could be identified as cow bones, thus they also belong to the historic era. Some egg shell material was also found in the upper levels and can be assigned to the historic era.

A ceramic sherd from the first level of Unit 101-1, Catalog Number 723, is a finely made

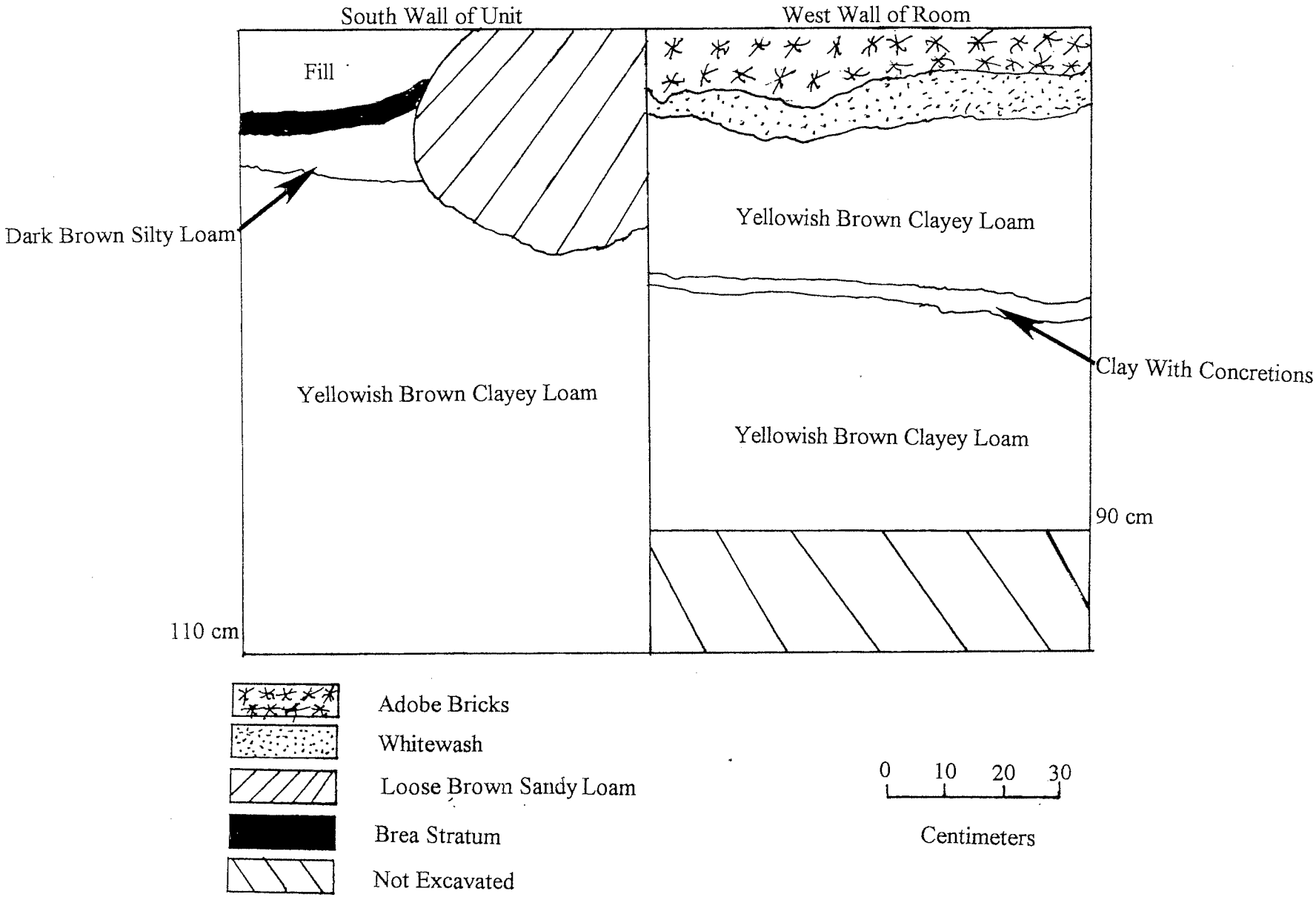
portion of a cup decorated with an English hunting scene. It is quite similar to an artifact (C59. 8.2) in the Rancho Los Cerritos collection. It also compares favorably to Catalog Number 814, recovered from the 60 to 70 centimeter level of the same unit.

Prehistoric material was present in very small quantities. Unit 101-1 contained a chert primary flake and a chert secondary flake in the 20 to 30 centimeter level, as well as a fragment of chert debitage in the 70 to 80 centimeter level. Unit 101-2 yielded a secondary chert flake from the 10 to 20 centimeter level, a bone tool fragment from the 20 to 30 centimeter level, a secondary metavolcanic flake from the 30 to 40 centimeter level and a fragment of chert debitage from the 40 to 50 centimeter level. It is probable that much of the shell and bone found in the units also dates to the prehistoric era.

Unit 101-2 was extended to the west as far as the adobe wall to allow documentation of the wall in that area. The profile drawing on the following page depicts the southern wall of the unit and the western wall of the unit where it exposed the wall. A thick layer of brea asphaltum was exposed in both units at about 15 to 20 centimeters depth. It should be kept in mind that this depth is measured from below the approximately 20 centimeters of concrete that was in the room at the beginning of the project. The brea stratum in Unit 101-2 did not extend to the west wall, but was separated from it by a deposit of loose, sandy loam. At first it was thought that the loam represented a shallow trench cut for the first courses of adobe bricks, but a similar feature was not present in Unit 101-1. Furthermore, the loam terminated the brea stratum, thought to be from the sealing of the original roof. The roof work, of course, would not have occurred until the adobe wall was in place, so the loam must represent some later disturbance. Whitewash on adobe plaster was detected on the wall to a depth of approximately 20 centimeters. The cementing agent had been almost entirely leached out, so the plaster had the appearance of clean sand and was extremely fragile. The whitewash and adobe plaster extended to about 20 centimeters depth, the same depth as the brea layer. Apparently, the original floor of the room was at about this depth.

Units 103-1 and 103-2: These two units were excavated in the Milk Room (Rooms 127-130) area to the east of Units 101-1 and 101-2. A modern wall was being demolished in this area, but an interior adobe wall had once stood there. The area where the adobe interior wall once

FIGURE 5: SOUTH AND WEST WALL PROFILE, UNIT 101-2



joined the exterior courtyard wall could be clearly seen. There was never any plaster in the area - it was left exposed in 1930.

The space available for excavation in the area of wall removal was quite limited. A bathroom occupied the northern end of the wall area on its western side and the soil below the removed wall was filled with water pipes, drains and electrical conduit. It was clear that the northern part of the wall area was extensively disturbed and that excavation in that area would not yield useful results. This restricted excavation to the southern part of the room, but the units, each one meter by 50 centimeters, had to be oriented with the long axis at right angles to the demolished wall. In one way the orientation was an advantage, since it provided access to a portion of the room interior as well as the area where the wall had stood. Both units were excavated to a depth of 80 centimeters.

The two units yielded historic artifacts throughout their depth, such as plaster fragments, brick fragments, wood fragments, nails and fragments, and similar material. Surprisingly, there was but little glass or ceramic items in the two units, a situation quite different from all other units except Units 100 and 101, under the courtyard wall, which were essentially sterile. Further, the few such items that were recovered were all in the upper levels of the units. A glass shard (Catalog Number 975) was recovered from the 10 centimeter level of Unit 103-1. The 10 centimeter level of Unit 103-2 yielded three ceramic pieces (Catalog Numbers 1031, 1032 and 1033), two glass shards (Catalog Numbers 1034 and 1035) and a fragment of a glass rod (Catalog Number 1045), possibly a fragment of a medicine applicator. Window pane shards (Catalog Numbers 1071 and 1074) were found in the 12 to 15 and 15 to 20 centimeter levels of the same unit.

Prehistoric material was found in both units. The prehistoric material is summarized in the table on the following page. It is probable that much of the bone and shell found in the two units is also from the prehistoric era.

Units 102-1, 102-2, 102-3 and 102-4: One prior excavation had been completed in the Foreman's Room (Room 101) by Greenwood (1987). The unit was one by one meter in size and was placed in the northeast corner of the room. The upper strata, extending to about five

Table 3: Prehistoric Recovery From Units 103-1 and 103-2

Unit	Depth (cm)	Artifact	Catalog Number
103-1	0-10	Chert debitage	961
	10-20	Chert secondary flake	970
		Chert secondary flake	980
	30-40	Chert secondary flake	1001
	70-80	Chert secondary flake	1021
		Chert debitage	1022
103-2	20-30	Quartzite primary flake,	1104
		Chert secondary flake	1103
	40-50	Chert secondary flake	1112

centimeters was interpreted as overburden. While not directly stated, the overburden was probably placed to bring the floor level to the same level as the prior concrete floor. The concrete floor had been placed during the 1930 modernization, but was removed in 1980 or 1981 in order to repair a water leak. Another hard surface was encountered at five to eight centimeters. This surface was interpreted as a floor containing glass, ceramic fragments and bone. From the hard surface to a depth of 50 centimeters the unit contained nails, glass and shell, and was extensively disturbed by roots and rodents. Fallen fragments of adobe brick were also seen. The unit was excavated to 110 centimeters, where a change in soil was noted. This change occured adjacent to the lowest course of the adobe wall. Three chert flakes were recovered from the unit, at depths of 30 to 40, 40 to 50 and 90 to 110 centimeters. Greenwood was focused primarily on the architecture of the wall and foundation. Surprisingly, it was discovered that no foundation existed, a result repeated at two other units in the main house and the north wing.

Units 102-1, 102-2, 102-3 and 102-4 were placed equidistant from each other in a row about 30 centimeters from the west wall of the room, centered on the area to be disturbed by footing excavation. While details of the wall were of interest, the units were not placed adjacent to the wall, since the wall would have to be cleaned to the adobe before the concrete footing could be placed, thus providing ample opportunity for documentation. Units 102-1, 102-2 and

102-4, each 50 by 50 centimeters in size, were excavated first. Unit 102-3 was later moved north, to be immediately adjacent to, and an extension of, Unit 102-4. This was done to allow deeper excavation of both units. The two units (102-3 and 102-4) will be discussed as a single entity, since the relocation of Unit 102-3 effectively created one unit 100 by 50 centimeters in size.

A series of six hardened surfaces was encountered in Unit 102-1, including the upper floor surface, between zero and 30 centimeters depth. Seven such surfaces were found in Units 102-3 and 102-4. Only four similar surfaces were detectable in Unit 102-2, but this unit was more disturbed. An electrical conduit crossed the unit, apparently having been placed after the hardened surfaces had been created.

Below the hardened surfaces the soil was dark in color and contained a mixture of historic and prehistoric artifacts. An apparent color change in the soil near 140 centimeters depth proved to be the result of increasing moisture at depth. When dried, soils from various depths below 30 centimeters in all four units were remarkably uniform in color.

Unit 102-1 was the furthest south of the units excavated in the Foreman's Room (Room 101). The unit was excavated to 80 centimeters depth. Historic material in Unit 102-1 was unremarkable glass, metal fragments (some nails), ceramics, plaster and concrete fragments, but was present throughout the unit. Floral remains were preserved in the unit. A fragment of leaf and a seed hull were recovered from the 6 to 10 centimeter level, a fragment of wood bark was recovered from the 16 to 19 centimeter level, a sunflower seed was found at 19-21 centimeters, a wood fragment came from 24 to 30 centimeters, a fragment of milled wood was found at 30 to 40 centimeters, a wood fragment was found at 50 to 60 centimeters, and two wood fragments, one milled, were collected at 60 to 70 centimeters depth. This remarkable preservation argued strongly that the soils had not been in place for any great length of time.

Unit 102-1 contained a few prehistoric artifacts. A fragment of a bone tool came from 6 to 10 centimeters depth, a chert secondary flake was found at 24 to 30 centimeters depth, a fragment of chert debitage was found at 30 to 40 centimeters, and a fragment of chert debitage and a chert secondary flake were found in the 70 to 80 centimeter level. It is probable that much of the shell and bone found throughout the unit is also of prehistoric origin.

Unit 102-2 was to the north of Unit 102-1 and was also excavated to 80 centimeters

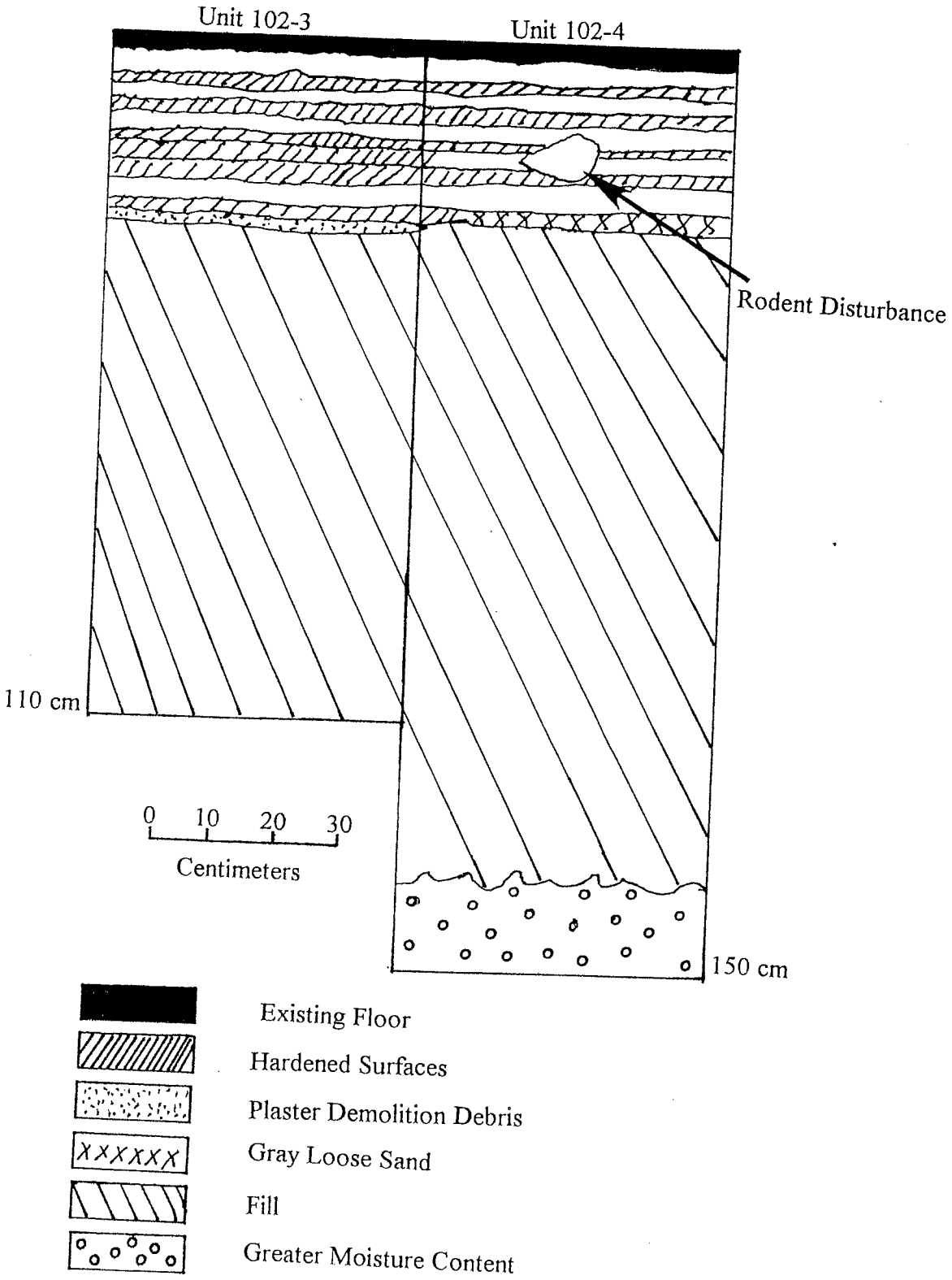
depth. Fewer hardened surfaces were encountered in the upper levels than in the other units, but this was probably due to the disturbance caused by an electrical conduit that had been emplaced across the unit. Since the conduit and the fixtures toward which it led were modern, it is surmised that the conduit is not part of the 1930 modernization, but from some later period. Apparently, no electrical work was accomplished in the room after 1930, until the system was rewired in 1985. It is also possible that the original 1930 conduit and fixtures were replaced when the floor was removed in 1980/81.

As with Unit 102-1, Unit 102-2 contained unremarkable historic debris throughout its depth. Floral material was also preserved and recovered in about the same quantities. One rather important artifact (Catalog Number 301) is a fragment of concrete with a black waterproofing material on one surface. This artifact appears identical to the concrete and waterproofing material observed in the Milk Room (Rooms 127-130) in the northern wing (see Catalog Number 1130 as an example of the material from the Milk Room). This artifact, and several similar pieces, establishes that the concrete floor in the Foreman's Room (Room 101) installed in the 1930s was quite similar to that in the Milk Room, that is, two pours separated by the waterproofing.. One bone from Unit 102-3 was identified as sheep, and it is likely that many of the larger bones are cow, thus dating to the historic era.

A chert primary flake and two chert secondary flakes were recovered from the 50 to 60 centimeter level of Unit 102-2. No other prehistoric material was found in the unit, but much of the shell and bone, found throughout the unit, is probably of prehistoric origin.

Units 102-3 and 102-4 were excavated immediately adjacent to each other, so can be treated as a single unit. Units 102-3 was excavated to 110 centimeters depth, while Unit 102-4 was excavated to 150 centimeters. Seven hardened surfaces were encountered in the upper 30 centimeters of the unit, below which was a very uniform, dark colored soil that was rather loose and contained a mixture of prehistoric and historic material. A change in the soil was observed at a depth of about 135 centimeters, but the change proved to result from increasing moisture. Soil from above and below the apparent change were identical when dried to a uniform moisture content. A profile drawing of the west wall of Units 102-3 and 102-4 appears on the following page.

FIGURE 6: WEST WALL PROFILE, UNITS 102-3 AND 102-4



Greenwood (1987) reported many roots and extensive rodent disturbance in the unit located in the northeast corner of the Foreman's Room (Room 101). Greenwood also described the soils at 100 centimeters as changing to a reddish color. Historic and prehistoric artifacts were encounterd in the Greenwood unit and in the units excavated during the current project at about the same frequency and the soil between the upper hardened surfaces and about 100 centimters depth appear quite similar. Nevertheless, very little detectable rodent disturbance and very few roots were encounterd in the units excavated as part of this project.

Floral material was found in Units 102-3 and 102-4 at the same frequency and depth as in Units 102-1 and 102-2. Again, the preservation of material such as leaves and seed pods is quite remarkable.

Nails, glass shards, brick fragments, plaster fragments, a few ceramic fragments and similar material was recovered from both Unit 102-3 and Unit 102-4. A small fragment of a copper sheet (Catalog Number 413) was recovered from the 40 to 50 centimeter level of Unit 102-3 and a copper rivet was found at 80 to 90 centimeters. Another very small fragment of copper was recovered from the 110 to 120 level of Unit 102-4.

A glass marble (Catalog Number 569) was encountered in the 30 to 40 centimeter level of Unit 102-4. There are similar marbles in the Flint family marble collection at Rancho Los Cerritos, dating to the 1880s. The Flints were cousins of the Bixbys. A ceramic button (Catalog Number 653) was recovered from the 40 to 50 centimeter level of Unit 102-4. The button is small, with four thread holes in a central, circular depression. The button is a Type 4, as described by Le Vine (1975), who preformed a detailed analysis of Rancho Los Cerritos buttons. The button is of a type commonly used on dress shirts. A shell button (Catalog Number 641) was recovered in the 90 to 100 centimeter level of Unit 102-4. This button is a Le Vine Type 8 and could have been from either a dress or shirt. A ceramic tableware fragment (Catalog Number 653), found in the 100 to 110 centimeter level of Unit 102-4, has a geometric flower pattern and probably dates to the early 1900s. A fragment of a cup or soup bowl (Catalog Number 700) recovered from the 130 to 140 centimeter depth of Unit 102-4 has a blue willow pattern and is very similar to a bowl in the Rancho Los Cerritos collection, Accession Number C64-9-4.

Units 102-3 and 102-4 also yielded a scattering of prehistoric material. This material is

summarized in the table on the following page.

Monitoring: In all cases where units were excavated, a large trench was cut to provide space for emplacement of concrete and steel footings to support the adobe walls. All footing excavation activity was monitored by an archaeologist and material was collected as it appeared. In the case of the single excavation in the Foreman's Room (Room 101) and the two excavations in the Milk Rooms (Rooms 127-130), the soil could be examined as it was being removed. There is a high degree of confidence that the recovered material came from somewhere in that particular excavation. The excavations for the courtyard wall and the entry way were different in that a great deal of disturbance and soil mixture took place while the excavation and monitoring was in progress. Much of the collected material is certainly from the excavation where it is cataloged, but it must be understood that some material may be from surrounding soils.

North Courtyard Wall: Seven artifacts, two bones and a shell fragment were recovered from the North Courtyard Wall area. These include five glass items, including bottle necks and bodies. A singletree cleat (Catalog Number 1163) is the most interesting artifact found. It is hand made, probably in the Rancho Los Cerritos blacksmith shop. One fragment of chert debitage (Catalog Number 1161) represents the only prehistoric material. Interestingly, the debitage was inside a fragment of an adobe brick. One of the bones is a fragment of cow rib dating to the historic era.

South Courtyard Wall: Nine whole and fragmentary bricks were collected from the South Courtyard Wall area. It will be recalled that the original wall in this area was adobe that had been repaired with brick on top of the adobe, and that essentially sterile conditions were encountered in the units placed here. Since the wall footing was wider than the original wall, the bricks probably represent material from the 1930s repairs, dropped while that activity was taking place. A sample of adobe and another of mortar were collected. These were probably from the original courtyard wall. Four glass shards, all apparently from various bottles, were recovered, as were two nails and a fragment of unidentifiable metal. A railroad tie plate with two spikes was recovered during the monitoring. A fragment of plaster with adhering metal mesh identical to that used in the 1930 modernization was recovered. A fragment of milled wood, apparently a fragment of a handle of some sort was also recovered. This may have been from an early courtyard gate.

Table 4: Prehistoric Recovery From Units 102-3 and 102-4			
Unit	**Depth (cm)**	**Artifact**	**Catalog Number**
102-3	31-40	Chert primary flake	396
	40-50	Chert secondary flake	412
	50-60	Chert secondary flake	420
	60-70	Chert secondary flake	431
		Chert secondary flake	432
	70-80	Chert secondary flake	454
102-4	40-50	Chert debitage	585
		Metavolcanic debitage	586
		Quartz fragment	587
	60-70	Bone tool fragment	613
	70-80	Chert debitage	625
	100-110	Chert debitage	650
	110-120	Bone tool fragment	676
		Bone tool fragment	677
		Chert debitage	675
	140-150	Chert debitage	713
		Chert debitage	714

Four bones were recovered in the South Courtyard Wall area, and two could be identified as cow. The other two are large enough to have been from a cow sized animal. All of these bones probably date to the historic era.

No prehistoric artifacts were recovered from the South Courtyard Wall area, but three shell fragments may be either historic or prehistoric.

Courtyard Entry: The entry footing area was shallower than the other excavations, but covered a much larger area. Historic artifact recovery in the entry area was quite high. The gate

funneled all traffic through the immediate area, so it is not surprising that an accumulation of artifacts was found there. The historic material is summarized in the following table:

Table 5: Historic Recovery From the Courtyard Entry Area

Artifact	Number	Catalog Numbers
Brick fragments	2	1313, 1314
Ceramic bowl fragment	1	1318
Ceramic plate fragment	1	1317
Ceramic fragments, unidentifiable	3	1319, 1320, 1321
Bottle fragments	4	1322, 1323, 1324, 1325
Window pane fragment	1	1326
Glass fragments, unidentifiable	6	1327, 1328, 1329
Metal barrel hoop fragment	1	1330
Nails	7	1315, 1316
.22 caliber shell casing	1	1311
Harness fragment, leather and rivet	1	1312
Milled wood fragment	1	1310

Two bone fragments, a portion of a sheep scapula and part of a large unidentifiable rib, were recovered in the Courtyard Entry area. A few fragments of shell were also recovered, but there were no definite prehistoric artifacts.

Milk Room Trench: Two trenches were excavated in the Milk Room (Rooms 127-130). The first was adjacent to the west wall of the Milk Room in the area where Units 101-1 and 101-2 were excavated. This trench contained numerous historic artifacts. The second trench was located to the east where Units 103-1 and 103-2 were excavated. No material of interest was recovered from this trench. It will be recalled that several artifacts were recovered from Units 103-1 and 103-2, but the two units extended into the floor areas in the rooms adjacent to the demolished modern wall, which had, in turn, replaced an original adobe wall. The trench itself

covered only the area where the wall had stood, so it is not surprising that no artifacts had accumulated there.

The vast majority of the historic artifacts recovered from the Milk Room (Rooms 127-130) trench were nails of various kinds and ages. The nails are described in Catalog Numbers 1349 through 1357. Many of the nails are cut, indicating earlier age, but others are clearly modern. Most of the nails probably relate to the 1930 modernization and later activities.

One interesting artifact, Catalog Number 1348, is a circular piece of adobe plaster, perfectly flat on its lower surface and rounded on the upper. Apparently, this object fell from some distance while still pliable onto a hard surface and then remained there until completely set. Four glass shards were recovered from the trench, and one is apparently from a bottle. One glass shard, Catalog Number 1346, is a fragment of a glass tube that may have been a thermometer or medicine applicator. A sunflower seed was also recovered from the trench.

Bones were common in the Milk Room (Rooms 127-130) trench. Rabbit, gopher, sheep and cow were among the identified bones. While most of the bone could not be identified, many were large enough to have been from either sheep or cow. A few of the bones had been partially burned. A quantity of shell was also recovered from the trench. No prehistoric artifacts were recovered during monitoring of the Milk Room trench.

Foreman's Room Trench: The Foreman's Room trench was by far the most extensive of the excavations made for footing construction. Units 102-1, 102-2, 102-3 and 102-4 were excavated in this area, and while extensively disturbed they were relatively rich in historic material. Consequently, more material was recovered in the Foreman's Room trench than in other areas. The historic material is summarized in the table on the following page.

One of the bricks from the Foreman's Room (Room 101) trench, Catalog Number 1218, was the only brick recovered during the project containing an identifiable maker's mark. In a rectangular depressed area the letters --MONS can be seen. This brick came from the Simons brick factory, active in Los Angeles from the early 1900s to the 1940s (Gurcke 1987).

The fragment of concrete with waterproofing, Catalog Number 1200, is identical to material from the Milk Room (Rooms 127-130) where two concrete floors were separated by a waterproofing material. This establishes that the concrete floor that existed in the Foreman's

Table 6: Historic Recovery From the Foreman's Room Trench		
Artifact	**Number**	**Catalog Numbers**
Adobe fragment	1	1250
Brick	1	1218 (see discussion)
Brick fragments	7	1176, 1251, 1297, 1298
Ceramic pitcher handle	1	1255
Ceramic plate fragments	3	1201
Ceramic fragments, unidentifiable	3	1203, 1256, 1257
Concrete with waterproofing	1	1200 (see discussion)
Fired clay fragment	1	1177
Glass container fragments	12	1178, 1179, 1207, 1205, 1209, 1254, 1206
Glass bottle fragments	2	1258, 1340
Window pane fragment	1	1208
Glass fragments, unidentifiable	9	1180, 1210, 1253
Shoe insole, eyelet and strap	1	1202
Harness hardware	1	1192
Nails	12	1193 - 1198, 1217, 1276
Railroad spike	1	1341
Plaster fragment	1	1273
Bakelite fragment	1	1248
Clay tile fragments	3	1252
Milled wood fragments	8	1175, 1191, 1249, 1299

Room (Room 101) was of similar construction.

Many bones were found in the Foreman's Room trench. Identifiable animals included turkey, rabbit, cow, ground squirrel and sheep. Many of the unidentified bones are large enough to have been from sheep or cow.

Only one prehistoric artifact was recovered during the Foreman's Room (Room 101)

trench excavation, but it is most interesting. The artifact, Catalog Number 1384, is a pottery sherd recovered from inside an adobe brick fragment. The sherd, analyzed by Sue Wade, is a type of Colorado Buff ware, uncommon in this area. Wade's full report is at Appendix D. Wade concludes that the sherd most likely originated in the Colorado Desert region of eastern California or western Arizona. It is a Late Period piece, and establishes that there was trade between the Rancho Los Cerritos and Colorado River areas.

Foreman's Room Wall Cleaning: The construction crew was asked to not excavate completely to the adobe walls in the Foreman's Room (Room 101). The soil was carefully removed from the wall, artifacts that appeared were collected and the details of the wall were documented. All of the west wall was exposed, as were portions of the north and south walls.

Historic artifacts recovered during the wall cleaning are summarized in the table below.

Table 7: Historic Recovery From the Foreman's Room Wall Cleaning

Artifact	Number	Catalog Numbers
Adobe plaster	1	1263
Brick fragment	1	1261
Bottle fragment	1	1259
Glass marble	1	1262
Nail	2	1169, 1269
Shell button	1	1270 (see discussion)
Brick fragments	2	1274, 1275 (see discussion)
Whitewash, asphaltum	1	1271 (see discussion)
Asphaltum sample	1	1170
Chamber pot fragments	4	1165
Glass container fragments	4	1167, 1171
Ceramic plate fragment	2	1168
Milled wood fragment	1	1172
Whitewash, adobe plaster	1	1272 (see discussion)

The shell button (Catalog Number 1270) is a Le Vine (1975) Type 10, commonly used on dress shirts.

The two brick fragments (Catalog Number 1274 and 1275) were both discovered lying in contact with the wall at the deepest depth of excavation. While described as fragments, each example is nearly one half of a full brick. The locations where these two items were found are shown on the wall drawing on the following page.

The entire wall to nearly the deepest level of excavation was covered with whitewash. The whitewash covered a layer of plaster from which the cementing agent had been almost entirely leached. The plaster had the appearance of clean sand and crumbled at the lightest touch. Catalog Number 1272 is an example of the whitewash and plaster. The extent of the visible whitewash can be seen on the drawing on the following page. The whitewash at depth was in poorer condition than the whitewash at shallower levels, but a stripe of black paint could be detected at the same level in places along the wall. Actually, the "paint" appears to be a thin layer of the brea asphaltum used to seal the original roof. A sample of this material is preserved as Catalog Number 1271. The location of the "paint" stripe is shown on the drawing on the following page. A thick layer of brea asphaltum was noted along much of the wall, at depths below the stripe. It is probable that the brea layer represents material introduced when the original roof was being sealed. The original slope of the terrain in the area of the Foreman's Room (Room 101) was downward from east to west. Judging from existing slopes, the western part of the Foreman's Room was probably about 40 centimeters lower than the eastern part. Certainly, this slope would have been leveled before anyone lived in the room. This could have been done by moving soil from the eastern part of the room to the western or by importing fill material to place in the western part of the room.

Figure 7, on the following page, depicts a dense layer of brea asphaltum near the bottom of the Foreman's Room (Room 101) trench. This layer could be traced along most of the length of the western wall at approximately the depth shown in Figure 7. It is thought that this layer of brea was from leakage during the time when the original roof was being sealed. If this is correct, the brea layer represents the lowest level of historic occupation in the room. The brea appeared to be puddled against the west wall, and did not extend more than 15 to 20 centimeters into the

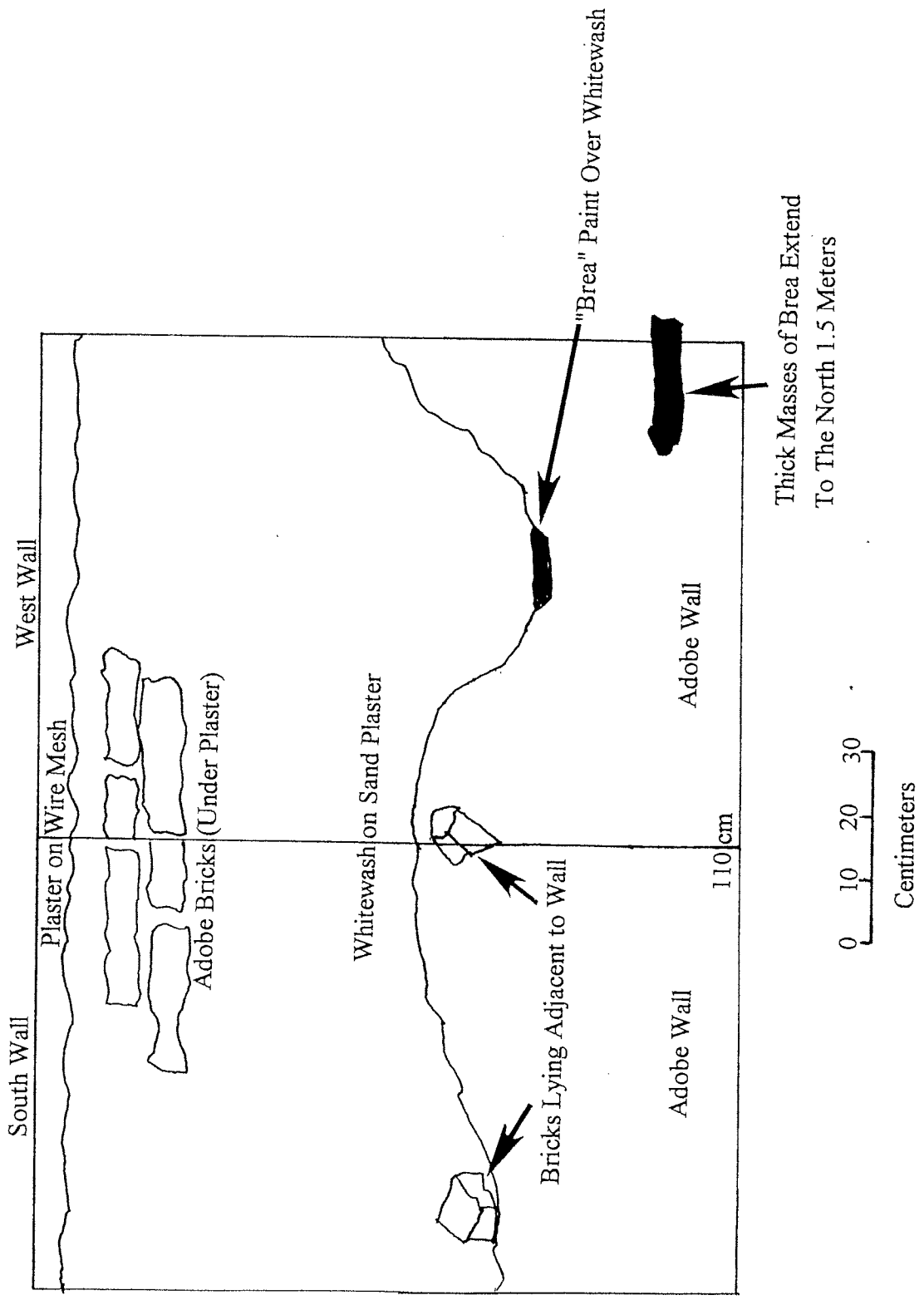


FIGURE 7: SOUTH AND WEST WALL PROFILE, FOREMAN'S ROOM

room. Since the original ground surface sloped from east to west, this puddling against the west wall would occur if the floor of the room had not yet been leveled. Similar strata of brea were noted in the Milk Rooms, but were much more disturbed.

DISCUSSION

Introduction: Earlier in this report a series of hypotheses, formulated to guide the project work, was presented. These hypotheses provide the basis for the following discussions.

Hypothesis 1: Original architectural features will be revealed during the excavations.

One of the most important observations made during this project is that the Foreman's Room (Room 101) soil, penetrated to 150 centimeters depth from the floor level, is entirely fill, emplaced during the 1930 modernization. There are several lines of evidence pointing to this conclusion. First, the inside wall was finished with plaster and whitewash (See Figure 7). This finishing would not have been done unless the wall once formed part of a living space. Secondly, brick halves were found at the deepest levels adjacent to the walls. These fragments are identical to the bricks known to have been used during the 1930 modernization. They were found at such depths because the fill in the room was emplaced only after the repair work on the walls and windows had been completed. Lastly, pictures of Rancho Los Cerritos taken at the time of the 1930 modernization and before, clearly show a door in the south wall of the Foreman's Room (Room 101), opposite the current door, entering at the level of the exterior ground surface. This is about at the same level as the deepest excavations in the room interior. The pictures are in the Rancho Los Cerritos collection and are identified as CHP 0048b (November 1930) and CHP 0045 (July 1930).

The fill in the Foreman's Room (Room 101) was thus placed as part of the 1930 modernization, probably to bring the floor level up to that of the balance of the south wing. Accordingly, the fill itself can be thought of as an architectural detail. The fill contained numerous historic and prehistoric artifacts and ecofacts. The bulk of these were originally deposited in some exterior area and brought to the Foreman's Room as part of the fill. Earlier excavations to the southwest of the Foreman's Room were interpreted as an adobe borrow pit subsequently filled with trash. This fill probably dates to the J. Temple period (1844-1866). Considerable regrading

was accomplished in 1930 in the courtyard, west and north of the hillsides and along the entry road. It is probable that the fill in the Foreman's Room was derived from these areas. This would also account for the seeds, leaves and husks found in the room. Such material would have been picked up with the fill, but since it was only placed in 1930, sufficient time has not elapsed for it to completely decay.

The prehistoric material found in the Foreman's Room (Room 101) clearly indicates a prehistoric presence in the area, but the material is very sparse. It is probable that the area from which the fill was taken is on the periphery of a much larger prehistoric deposit, or as stated above, the fill was taken from several areas.

The hardened surfaces in the upper 30 centimeters of the Foreman's Room (Room 101) were originally thought to be living floors, but this notion was abandoned when it became clear that the room had been filled in 1930. Apparently, the bulk of the fill was placed with little compaction, but as the desired floor level was approached the material was compacted to provide support for the upper concrete floor. At the beginning of the project the floor was at the level of the door sill. This is probably the same level as the original concrete floor, which is thought to have been about 20 centimeters in thickness, based on observation of the removal of the floor from the Milk Room (Rooms 127-130). Apparently, when the concrete floor was removed in the early 1980s to repair a water leak, more fill material was brought in and compacted to bring the new soil floor to the level of the removed concrete floor. Thus, the numerous compacted surfaces in the upper levels of the Foreman's Room are probably a combination of material introduced in 1930 and in the 1980s.

While the original living floor was quite deep in the Foreman's Room (Room 101), such was not the case in the Milk Room (See Figure 4). In the Milk Room (Rooms 127-130) the adobe wall and its covering of sand plaster and whitewash extended to only about 25 centimeters below the level of the concrete floors. This is thought to be about the depth of the original living floor, but while fragments of hardened surfaces were found, none extended for any great distance. It was clear that disturbance was extensive and that much mixing had taken place. Fill, the bulk of the deposit in the Foreman's Room, was present in only minor quantities in the Milk Room.

The excavations confirmed that no foundation exists under the Foreman's and Milk Room

walls. No foundation was found under the Courtyard Wall, but the replacement wall certainly has a deep footing. These observations confirm the observations of Greenwood (1987) that Rancho Los Cerritos was constructed without foundation. The lack of a foundation is a rather unique architectural method, adding to the historical importance of Rancho Los Cerritos.

Demolition of the modern wall in the Milk Room (Rooms 127-130) revealed a vertical area of broken adobe bricks marking the beginning of the original adobe wall. The adobe bricks had been laid in stretcher bond with the interior wall incorporated. In other words, the south wall of the Milk Room and the interior adobe wall were constructed at the same time.

In summary, it is clear that archaeological methods can reveal architectural details related to original construction and to subsequent repair and modernization work. Hypothesis 1 is supported by the findings of this project.

Hypothesis 2: Artifact or feature patterns will reveal functional divisions of the interior space.

Very few definite features were encountered during the excavations at Rancho Los Cerritos. The features that were observed were associated with the architecture, wall details, hardened surfaces and the like.

No artifact associations within the portion of the Rancho Los Cerritos soils explored during this project were detected. Even those chance occurrences where similar artifacts were found close together could not be described as associations, since the matrix material was clearly fill or extensively disturbed.

While Hypothesis 2 is not supported by the current work, the conditions where the excavations occurred were unusual. In most instances, features and artifact associations can be expected when excavating interior rooms with a long period of occupation.

Hypothesis 3: In situ historic deposits will be encountered in the rooms where excavations are to be made. Such deposits will be important.

The excavated soils in the Foreman's Room (Room 101) were fill that had been brought in from somewhere outside the building. The material contained in such soils cannot be considered as in situ, at least if one is referring to the original point of deposition. The fill material and the artifacts contained therein, however, represent activities related to the 1930 modernization and

can be considered as in situ when viewed in this narrow sense. The artifacts and ecofacts within the fill cannot be used to make positive statements regarding the early occupation, but they do demonstrate, in part, how the 1930 modernization was accomplished. A limited number of artifacts, the brick halves found at the deepest levels in the Foreman's Room (Room 101) were in situ, but were also related to the 1930 modernization.

Since the 1930 work at Rancho Los Cerritos is now of sufficient age to have historic importance, it must be concluded that Hypothesis 3 is supported. It must be understood that this conclusion applies only in a limited sense to the fill and a few artifacts clearly dating to the 1930s, but not to the older historic material and prehistoric material contained within the fill.

Hypothesis 4: In situ prehistoric deposits will be encountered in the rooms where excavations are to be made. Such deposits will be important.

No in situ prehistoric material was found in any of the rooms excavated during this project. In the Foreman's Room (Room 101) such deposits may be present at deeper levels than were excavated during this project. The excavations in the Foreman's Room had no clear change in the soils to the deepest depth explored, so it is quite possible that the original soil surface was not exposed. Since the scattered prehistoric remains present in the fill establish that a prehistoric site is nearby, it is possible that such material is present under the Foreman's Room.

The excavations in the Milk Room (Rooms 127-130) did penetrate for some distance into native soils. No in situ prehistoric material was encountered in these excavations.

Hypothesis 4 is not supported by the current work.

Hypothesis 5: In situ historic deposits will not be encountered in the excavations under the courtyard wall.

The only historic material found in the courtyard wall footing excavations were in the upper few centimeters of soil and could have been easily introduced during the demolition of the wall.

Hypothesis five is supported by the current work.

Hypothesis 6: In situ prehistoric deposits will be encountered in the excavations under the courtyard wall. Such deposits will be important.

Prior to the beginning of the excavation it was known that a prehistoric deposit exists

somewhere in the immediate area. Prehistoric material in the form of cogstones and discoidals was recovered from somewhere within the building when excavations were made for plumbing and floor furnaces in 1930, though the exact area is not known. Since the courtyard wall had been in place since the mid 1840s, it was surmised that, if a prehistoric deposit was present in the area, excavations under the wall would disclose it. Very little prehistoric material was recovered from the courtyard wall excavations. The few fragments that were found were widely scattered and it is obvious that no extensive prehistoric deposition occurred here. No importance can be attached to few prehistoric items that were recovered.

Hypothesis 6 is not supported by the current work

Hypothesis 7: The study will confirm the worthiness of the structure for listing as a National Register of Historic Places property.

Several important observations were made during the current study. The Foreman's Room (Room 101) was filled during the 1930 modernization. This filling preserved large portions of plaster and whitewash, the original interior wall covering. This observation was made along the western wall and part of the southern wall in the Foreman's Room. It is clear that the fill has preserved the original wall covering. Probably the same conditions prevail at depth along the eastern wall. The same conditions probably prevail in the rooms to the east of the Foreman's Room. Apparently, these rooms also received some fill during the 1930 modernization. In other words, a great deal of the original treatment of the interior walls is probably preserved in the South Wing. The importance of this cannot be over stressed. Preservation of original interior wall treatment is very rare.

The observation that Rancho Los Cerritos was constructed without a substantial foundation, originally made by Greenwood (1987) and confirmed during this study, is very important. Buildings of this size almost invariably have some sort of foundation, and the lack of one at Rancho Los Cerritos makes the building unique.

Hypothesis 7 is supported by the current work. Clearly, Rancho Los Cerritos deserves its status as a National Register property.

CONCLUSIONS

The work at Rancho Los Cerritos completed during the current project consisted of excavations in areas where footings were to be constructed and monitoring of the remaining soil removals. While in situ artifacts were very rare, important architectural details were documented and the overall importance of Rancho Los Cerritos was reaffirmed. No additional archaeological work relative to the seismic upgrade of the structure is required.

It is recommended that Rancho Los Cerritos staff use extreme care when any sort of excavation within the south wing is contemplated. The interior walls of at least the westernmost rooms of the south wing have preserved under fill the original plaster and whitewash used to cover the adobe bricks. While not encountered during this project, it is quite possible that features such as niches and hanging brackets have been preserved. The plaster and whitewash are extremely fragile. Excavators should be prepared to preserve as much of this delicate material as possible when excavating in this part of the structure.

All artifacts, ecofacts and samples collected during the project, as well as all documentation and photographs generated during the work are curated at Rancho Los Cerritos.

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