



● **Board of Directors**
Engineering and Operations Committee

5/10/2022 Board Meeting

7-5

Subject

Review and consider Addendum No. 1 to the certified 2015 Final Environmental Impact Report for the Weymouth Plant Improvements; award a \$93,840,000 contract to J. F. Shea Construction, Inc. for rehabilitation of Basins Nos. 5-8 and Filter Building No. 2 at the F. E. Weymouth Water Treatment Plant; and authorize an agreement with Carollo Engineers, Inc., for an amount not to exceed \$495,000 for engineering support during construction

Executive Summary

Reliable operation of the flocculation, sedimentation, and filtration processes is essential for a surface water treatment plant to comply with its operating permit and produce water that meets federal and state drinking water regulations. The mechanical components of the flocculation/sedimentation basins and the valves that operate the filters at the F. E. Weymouth Water Treatment Plant (Weymouth plant) have reached the end of their service life and need to be replaced. In addition, the basin inlet channels need structural reinforcement to reduce the risk of damage following a major seismic event. This action awards a construction contract to rehabilitate the east side of the Weymouth plant (Basins Nos. 5-8 and Filter Building No. 2). This action also authorizes a consulting agreement to provide engineering support during construction.

Details

Background

The Weymouth plant was placed into service in 1941 with an initial capacity of 100 million gallons per day (mgd), and was expanded twice to its current treatment capacity of 520 mgd. The plant delivers a blend of waters from the Colorado River Aqueduct and State Water Project to Metropolitan's Central Pool portion of the distribution system, and to an exclusive service area. The Weymouth plant is located in the city of La Verne, approximately 1.5 miles from the Sierra Madre-Cucamonga Fault, which can generate a 7.0 magnitude earthquake.

Flocculation, sedimentation, and filtration are important unit processes within a conventional surface water treatment plant. The Weymouth plant has eight flocculation/sedimentation basins and two filter buildings. Basins Nos. 1-4 are located on the west side of the plant, adjacent to Filter Building No. 1. Basins Nos. 1-2 were constructed in 1940 as part of the original plant construction, and Basins Nos. 3-4 were added in 1949 during the first plant expansion. Basins Nos. 5-8 and Filter Building No. 2 were added on the east side of the plant in 1962 during the second plant expansion.

The mechanical, electrical, and structural components of the treatment basins and filters have deteriorated after 60 to 80 years of continuous service. Metropolitan staff has prioritized and staged their rehabilitation to minimize impacts to plant operations and enhance construction efficiency. Basins Nos. 3-4 were refurbished in 2005 and are presently in good operating conditions. Rehabilitation of Basins Nos. 5-8, which is the subject of this letter, will be synchronized with the installation of Metropolitan-furnished filter valves and actuators in Filter Building No. 2. Valve replacement in Filter Building No. 1 and rehabilitation of Basins Nos. 1-2 on the west side of the plant will proceed upon completion of Basins Nos. 5-8.

Basins Nos. 5-8 each contain rotating flocculation equipment, baffle boards, solids collection equipment, and settled water launder troughs. Basin isolation capability is provided by 32 manually operated gates that distribute

flows into the eight basins. Each filter building contains 24 filter units and houses valves ranging in diameter from 16 to 48 inches, piping, and process control equipment. The steel valve bodies and basin gates are corroded, and the embedded filter valve seals are also degraded. This degradation has led to leaking gates and valves, which have the potential to impact regular plant operation and impede routine maintenance activities when the gates and valves are relied upon to ensure dry conditions in the work areas.

Additionally, the basin inlet channels were evaluated under Metropolitan's seismic stability assessment program in 2012. These assessments identified the need to strengthen portions of the channel concrete walls. These retrofits are included in this project and will reduce the risk of damage following a major seismic event.

In November 2017, the Board authorized procurement contracts for 236 replacement butterfly valves with actuators. All Filter Building No. 2 valves have been delivered to a warehouse near the plant. Filter Building No. 1 valves are scheduled to be delivered by December 2022. Final design for the rehabilitation of Basins Nos. 5-8 and replacement of valves in Filter Building No. 2 is now complete, and staff recommends proceeding with award of a construction contract. Staff will return to the Board at a later date to award the construction contracts for valve replacement in Filter Building No. 1, and rehabilitation for Basins Nos. 1-2 on the west side of the plant.

The 2005 Final Environmental Impact Report (EIR) for the F. E. Weymouth Filtration Plant Ozonation Facilities and Site Improvements Program included the replacement of valve/actuators in Filter Building No. 2. In April 2015, Metropolitan's Board certified the Final EIR for the Weymouth Plant Improvements, which included the rehabilitation of Basins Nos. 5-8. Addendum No. 1 to the 2015 EIR, which is the subject of this action, addresses the potential environmental impacts associated with the proposed modifications identified after the original certification, including the remaining critical project components, such as Basins Nos. 1-4 inlet gates, motor control centers, local control panels, and electrical equipment.

In accordance with the April 2020 action on the biennial budget for Fiscal Years 2020/21 and 2021/22, the General Manager will authorize staff to proceed with Weymouth Basins Nos. 5-8 and Filter Building No. 2 Rehabilitation, pending the Board award of the construction contract and authorization of the engineering services agreement described below. Based on the current Capital Investment Plan (CIP) expenditure forecast, funds for the work to be performed pursuant to this action during the current biennium are available within the CIP Appropriation for Fiscal Years 2020/2021 and 2021/22 (Appropriation No. 15517). Funds required for work to be performed pursuant to the subject contract after Fiscal Year 2021/22 are budgeted within the Capital Investment Plan Appropriation for Fiscal Years 2022/23 and 2023/24. This project has been reviewed in accordance with Metropolitan's CIP prioritization criteria and was approved by Metropolitan's CIP evaluation team to be included in the Treatment Plant Reliability Program.

Weymouth Basins Nos. 5-8 and Filter Building No. 2 Rehabilitation – Construction

The scope of the construction contract includes: (1) replacement of treatment basin equipment; (2) replacement and modification of electrical and control equipment; (3) replacement of 127 filter valves and actuators with Metropolitan-furnished integrated valve/actuator units; (4) seismic strengthening of the treatment basin and inlet channel walls; (5) replacement of basin inlet gates; and (6) hazardous material abatement.

The basin rehabilitation work includes the removal and replacement of the existing flexible joint sealant and its adjacent concrete within the basins. Similar to the rehabilitation work that was recently completed on the Diemer plant's basins, Metropolitan has established protocols for abatement of these substances to ensure a safe working environment and to comply with the federal Toxic Substances Control Act. Approval for this abatement was obtained from the U. S. Environmental Protection Agency in March 2022. Since the basin equipment and baffle walls must be removed in order to gain access to the joints, the abatement work has been integrated into the overall scope of the subject contract. This abatement work will be completed with O&M funds in accordance with Metropolitan's current business practices as described below.

Metropolitan force construction includes preparation for sequential shutdowns and return of the basins and filters to service; electrical system shutdowns and switchovers; integration of the new equipment with the plant's supervisory control and data acquisition system; and relocation of instrumentation systems, equipment start-up, and testing.

A total of \$114 million in capital funds is required for this work. In addition to the amount of the contract described below (which includes \$90,840,000 in capital funds and \$3 million in O&M funds), other capital funds include the following service agreements: \$495,000 for technical support during construction by Carollo Engineers under a new agreement for filter building-related tasks; \$100,000 for environmental support services during construction by Psomas, as described below; and \$75,000 for specialized inspection services. The material sampling, environmental support, and specialized inspection services will be performed by specialty firms under contracts planned to be executed under the General Manager's Administrative Code authority to award contracts of \$250,000 or less. Other allocated funds for Metropolitan staff include: \$3,403,000 for Metropolitan force activities described above (which includes \$2,478,000 for labor and \$925,000 for materials and supplies); \$9,638,000 for construction management and inspection; \$2,655,000 for submittals review, responding to requests for information, and preparation of record drawings for basin related tasks; \$2,047,000 for permitting, hazardous material compliance monitoring, contract administration, environmental monitoring, and project management; and \$4,747,000 for remaining budget.

In accordance with provisions of the Governmental Accounting Standards Board, Metropolitan's work associated with environmental remediation must be conducted with O&M funds instead of a capital appropriation. \$3.2 million has been budgeted in O&M funds in fiscal years 2022/23 and 2023/24 for environmental remediation associated with rehabilitation of the Weymouth plant's Basins Nos. 5-8. This amount includes \$3 million for work to be performed by the contractor; and \$200,000 for specialized materials sampling and environmental monitoring by Ramboll Consultants, Inc, as discussed below.

Attachment 1 provides the allocation of the required capital funds. The total estimated cost to complete the rehabilitation of the Weymouth plant's Basins Nos. 5-8 and Filter Building No. 2, including the amount allocated to date and funds allocated for the work described in this action, is approximately \$123.2 million in capital funds and \$3.2 million in O&M funds. Approximately \$9.2 million has been expended on this project to date.

Award of Construction Contract (J. F. Shea Construction, Inc.)

Specification No. 1982 for Weymouth Basins Nos. 5-8 and Filter Building No. 2 Rehabilitation was advertised for bids on January 28, 2022. As shown in **Attachment 2**, three bids were received and opened on April 7, 2022. The apparent low bidder requested to be released from its bid in accordance with the California Public Contract Code due to an inadvertent clerical error made during the bid process, which materially changed its bid. Upon review of the request, the apparent low bidder was released from its bid. The second low bid from J. F. Shea Construction in the amount of \$93.84 million complies with the requirements of the specifications. The other bid was approximately \$95.2 million, while the engineer's estimate was \$107.4 million. For this contract, Metropolitan established a Small Business Enterprise (SBE) participation level of at least 20 percent of the bid amount. J. F. Shea Construction, Inc. has committed to meet this level of participation. The subcontractors for this contract are listed in **Attachment 3**.

This action awards a \$93,840,000 contract to J. F. Shea Construction, Inc. to rehabilitate Basins Nos. 5-8 and Filter Building No. 2 at the Weymouth plant.

Metropolitan staff will perform construction management and inspection. The total cost of construction for this project is \$100,543,000, which includes the amount of the contract, Metropolitan force activities (\$3,403,000), and previously procured Metropolitan-furnished equipment (\$3,300,000). Engineering Services' performance metric target range for construction management and inspection of projects with construction costs greater than \$3 million is 9 to 12 percent. For this project, the performance metric goal for inspection is approximately 9.6 percent of the total construction cost.

Engineering Support During Construction (Carollo Engineers, Inc.) – New Agreement

Carollo Engineers, Inc. performed final design for the filter valve installation under a board-authorized agreement. As the engineer of record, Carollo Engineers is recommended to provide engineering support during construction for filter building-related tasks. Planned activities include responding to requests for information from the contractor, reviewing construction submittals, and preparing as-built record drawings.

This action authorizes an agreement with Carollo Engineers, Inc. for a not-to-exceed amount of \$495,000 to provide engineering support during construction. The planned subconsultant for this agreement is LEE + RO, Inc.

Specialized Environmental Support (Ramboll Consultants, Inc.) – No Action Required

Ramboll Consultants, Inc. (Ramboll) conducted the PCB investigation at the Weymouth plant and prepared the Site-Specific PCB Remediation Waste Plan under a board-authorized agreement. Ramboll is recommended to provide remediation support during construction. Planned activities include monitoring and inspecting the contractor's remediation work, conducting confirmation field sampling, and preparing the final report for contractor oversight abatement.

A new agreement with Ramboll is planned to be executed under the General Manager's Administrative Code authority to award contracts of \$250,000 or less. The estimated cost for these services is \$200,000. For this agreement, Metropolitan established an SBE participation level of 25 percent. Ramboll has agreed to meet this level of participation.

Environmental Support During Construction (Psomas) – No Action Required

Psomas was prequalified through Request for Qualification No. 1265, based on the firm's extensive experience with CEQA compliance and environmental clearances, and its specific experience with facility environmental investigations and documentation. Psomas is recommended to provide environmental support services during construction. Planned activities include construction monitoring, performing nesting bird surveys, and preparing the project completion memorandum and Historic American Engineering Record report.

A new agreement with Psomas is planned to be executed under the General Manager's Administrative Code authority to award contracts of \$250,000 or less. The estimated cost for these services is \$100,000. For this agreement, Metropolitan established an SBE participation level of 25 percent. Psomas has agreed to meet this level of participation.

Alternatives Considered

During planning and design of this project, staff considered rehabilitating the treatment basins and replacing the filter valves under separate construction contracts. As each of the critical project elements (i.e., replacement of basin mechanical equipment, replacement of filter valves, and structural strengthening of inlet channels) would each require a partial plant shutdown, individual contracts would prolong the overall construction duration and cause numerous disruptions to plant operations. Synchronized construction of basin and filter rehabilitation on the same side of the plant would significantly reduce the number of plant shutdowns and outages. Since Basins Nos. 3-4 located on the west side of the plant were rehabilitated in 2005, staff prioritized rehabilitation of the facilities on the east side. The recommended approach of combining rehabilitation of Basins Nos. 5-8 and the adjacent Filter Building No. 2 under one single contract achieves construction efficiency by keeping plant shutdowns and outages to a minimum and reducing project costs related to contractor mobilization and construction contract administration. Rehabilitation of Basin Nos. 1-2 will take place in the future under a separate construction contract.

Summary

This action awards a contract to J. F. Shea Construction, Inc. for the rehabilitation of Basins Nos. 5-8 and Filter Building No. 2 at the Weymouth plant and authorizes an agreement for engineering support during construction. See **Attachment 1** for the Allocation of Funds; **Attachment 2** for the Abstract of Bids; **Attachment 3** for the listing of Subcontractors for Low Bidder; **Attachment 4** for the Location Map; and **Attachment 5** for Addendum No. 1 to the 2015 Final Environmental Impact Report for the Weymouth Plant Improvements.

Project Milestone

May 2025 – Completion of construction for the rehabilitation of Weymouth Basins Nos. 5-8 and Filter Building No. 2

Policy

Metropolitan Water District Administrative Code Section 5108: Appropriations

Metropolitan Water District Administrative Code Section 8121: General Authority of the General Manager to Enter Contracts

By Minute Item 49121, dated July 10, 2012, the Board authorized preliminary design of treatment basin inlet gates rehabilitation and seismic upgrades to basin inlet channels at the Weymouth plant.

By Minute Item 49324, dated February 12, 2013, the Board authorized preliminary design to rehabilitate Basins Nos. 5-8 at the Weymouth plant.

By Minute Item 49764, dated May 13, 2014, the Board authorized final design to replace filter valves at the Weymouth plant.

By Minute Item 50092, dated April 14, 2015, the Board certified that the Final Environmental Impact Report for the Weymouth Plant Improvements has been completed in compliance with CEQA and the State CEQA deadlines.

By Minute Item 51014, dated November 14, 2017, the Board awarded two contracts to procure filter valves at the F. E. Weymouth Water Treatment Plant.

By Minute Item 51963, dated April 14, 2020, the Board appropriated a total of \$500 million for projects identified in the Capital Investment Plan for Fiscal Years 2020/21 and 2021/22.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The Board certified the project's Final EIR on April 14, 2015. The Board also adopted at that time the Findings of Fact, the Statement of Overriding Considerations, the Mitigation Monitoring and Reporting Program, and the project itself. On November 16, 2021, Addendum No. 1 to the Final EIR was prepared to document the proposed minor modifications to the approved project as detailed in this board letter (see **Attachment 5**).

CEQA and the State CEQA Guidelines require the preparation of an addendum to a previously certified EIR if changes or additions to the project are necessary, but none of the conditions described in Section 15162 of the State CEQA Guidelines calling for the preparation of a subsequent EIR have occurred (Section 15164 of the State CEQA Guidelines). The proposed modifications to the previously approved project also do not meet any of the conditions requiring the preparation of a supplement to an EIR (State CEQA guidelines, Section 15163). Instead, the proposed modifications require only minor changes or additions to the evaluation in the certified Final EIR to make it adequate under CEQA. None of the proposed modifications would result in significant adverse impacts beyond those impacts already disclosed in the original Final EIR. Finally, the Board must certify that the addendum reflects Metropolitan's independent judgement and analysis.

CEQA determination for Option #2:

None required

Board Options

Option #1

- a. Review and consider Addendum No. 1 to the certified 2015 Final Environmental Impact Report for the Weymouth Plant Improvements.
- b. Award a \$93,840,000 contract to J. F. Shea Construction, Inc. to rehabilitate Basins Nos. 5-8 and Filter Building No. 2 at the Weymouth plant.
- c. Authorize an agreement with Carollo Engineers, Inc. for a new not-to-exceed total of \$495,000 to provide engineering support.

Fiscal Impact: Expenditure of \$114 million in capital funds and \$3.2 million in O&M funds.

Approximately \$1.5 million in capital funds will be incurred in the current biennium and has been previously authorized. The remaining funds from this action are accounted for in the next biennial budget and were authorized in April 2022.

Business Analysis: This option will enhance the operational reliability of the Weymouth plant by replacing critical process components.

Option #2

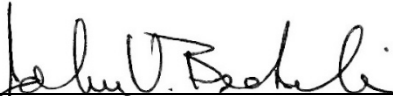

Do not proceed with the project at this time.

Fiscal Impact: None

Business Analysis: This option would forego an opportunity to enhance the operational reliability of the treatment systems, and may lead to costly urgent repairs and risk delivery interruptions following a major seismic event.

Staff Recommendation

Option #1

	4/25/2022
John V. Bednarski Manager/Chief Engineer Engineering Services	Date
	4/25/2022
Adel Hagekhalil General Manager	Date

Attachment 1 – Financial Statements

Attachment 2 – Abstract of Bids

Attachment 3 – Subcontractors for Low Bidder

Attachment 4 – Location Map

Attachment 5 – Addendum No. 1 to the 2015 Final EIR

Ref# es12681238

Allocation of Funds for Weymouth Basins Nos. 5-8 and Filter Building No. 2 Rehabilitation

	Current Board Action (May 2022)
Labor	
Studies & Investigations	\$ -
Final Design	-
Owner Costs (Program mgmt., envir. monitoring)	2,047,000
Submittals Review & Record Drwgs.	2,655,000
Construction Inspection & Support	9,638,000
Metropolitan Force Construction	2,478,000
Materials & Supplies	925,000
Incidental Expenses	-
Professional/Technical Services	
Carollo Engineers, Inc.	495,000
Psomas	100,000
Consultant Inspection	75,000
Right-of-Way	-
Equipment Use	-
Contracts	-
J. F. Shea Construction ¹	90,840,000
Remaining Budget	4,747,000
Total	\$ 114,000,000

The total amount expended to date for the Weymouth Basins Nos. 5-8 and Filter Building No. 2 Rehabilitation is approximately \$9.2 million. The total estimated cost to complete this project, including the amount appropriated to date, and funds allocated for the work described in this action is \$123.2 million in capital funds and \$3.2 million in O&M funds.

¹The total contract amount is \$93,840,000, of which \$3 million will be paid from O&M funds.

The Metropolitan Water District of Southern California**Abstract of Bids Received on April 7, 2022, at 2:00 P.M.****Specifications No. 1982****Weymouth Basins Nos. 5-8 and Filter Building No. 2 Rehabilitation**

The work consists of replacing all flocculation/sedimentation equipment at the Weymouth plant's Basins Nos. 5-8; strengthening basin walls and basin inlet channels; replacing 127 butterfly valves and their actuators in Filter Building No. 2 with Metropolitan-furnished equipment; replacing and modifying electrical and control equipment; and performing hazardous material abatement.

Engineer's estimate: \$107,420,000

Bidder and Location	Total	SBE \$	SBE %	Met SBE¹
Environmental Construction, Inc. ² Woodland Hills, CA	\$79,897,020.40	-	-	-
J. F. Shea Construction, Inc. Walnut, CA	\$93,840,000.00	\$ 20,274,914	21%	Yes
Steve P. Rados, Inc. Santa Ana, CA	\$95,196,800.00	-	-	-

¹ Small Business Enterprise (SBE) participation level established at 20% for this contract.

² Environmental Construction, Inc. requested to be released from its bid in accordance with the Public Contract Code due to an inadvertent clerical error made during the bid process which materially changed its bid.

The Metropolitan Water District of Southern California
Subcontractors for Low Bidder
Specifications No. 1982
Weymouth Basins Nos. 5-8 and Filter Building No. 2 Rehabilitation

Low bidder: J. F. Shea Construction, Inc.

Subcontractor and Location
Environmental Construction Group Signal Hill, CA
ATR Technologies, Inc. Pomona, CA
National Coating & Lining Murrieta, CA
GTE Metal Erectors, Inc. Canby, OR
CMC Rebar San Bernardino, CA
Helix Electric San Diego, CA



Addendum No. 1 to the F.E. Weymouth Water Treatment Plant Improvements Program

Environmental Impact Report, SCH No. 2013121074

November 9, 2021

Prepared For:

**The Metropolitan Water District of Southern California
Environmental Planning Section**

700 North Alameda Street
Los Angeles, California 90012

Prepared By:

Rincon Consultants, Inc.
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**THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA**

**ADDENDUM NO. 1 TO THE
F.E. WEYMOUTH WATER TREATMENT PLANT
IMPROVEMENTS PROGRAM
ENVIRONMENTAL IMPACT REPORT**

**(State Clearinghouse No. 2013121074)
Project Number 104931 Addendum No. 1**

**The Metropolitan Water District of Southern California
Environmental Planning Section
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November 9, 2021

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F. E. Weymouth Water Treatment Plant Improvements Program

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Addendum No. 1 to the Final Environmental Impact Report
F. E. Weymouth Water Treatment Plant Improvements Program

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Metropolitan Water District of Southern California F. E. Weymouth Water Treatment Plant Improvements Program

Addendum No. 1 to the Environmental Impact Report

1 Introduction

1.1 Purpose of Addendum No. 1

The purpose of this Addendum is to evaluate potential environmental effects associated with proposed minor modifications to the previously certified F. E. Weymouth Water Treatment Plant Improvements Program (“Weymouth Improvements Program” or “original Project”). The Final Environmental Impact Report (EIR) for the Project was prepared and certified by The Metropolitan Water District of Southern California (Metropolitan) Board on April 14, 2015 (“2015 EIR”). Subsequent to the certification of the EIR, minor modifications to the Project were identified.

This Addendum evaluates minor design modifications to the existing Project, which includes the Basins 5-8 Rehabilitation project evaluated in the 2015 EIR and the Filter Building 2 Valves Replacement project evaluated in the 2005 *Final Environmental Impact Report for the F. E. Weymouth Filtration Plant Ozonation Facilities and Site Improvements Program* (“2005 EIR”). During final design of the Basins 5-8 Rehabilitation and Filter Building 2 Valves Replacement projects, it was determined that the existing inlet gates located within Basins 1-4 were leaking and needed replacement. Additionally, the electrical equipment located at the Electrical Control Building (formerly called the Davey Shack) needed to be upgraded. The electrical equipment operates and controls the inlet gates, sedimentation clarifiers, flocculation system, and sludge removal system associated with Basin Nos. 5-8. These proposed modifications are described in detail in Section 2.0 of this Addendum and are summarized as follows:

- Basin Nos. 1-4. Replace eight inlet gates and associated actuators, and gate guides, motor control centers (MCCs), gate power panels, and local control panels as well as installation of a new remote input/output (I/O) device for extension of the remote terminal unit (RTU).
- Electrical Control Building. Install MCCs and air conditioning as well as replacement of the RTU, doors, access hatch, and windows.

To comply with the California Environmental Quality Act (CEQA) (Public Resources Code Sections 21000 et seq.) and *Guidelines for Implementation of the CEQA* (California Code of Regulations Sections 15000 et seq., hereinafter referred to as *State CEQA Guidelines*), this Addendum No. 1 has been prepared to evaluate the potential environmental impacts associated with the proposed modifications as described in detail in Section 2.0.

1.2 Regulatory Background

According to Section 15164(a) of the *State CEQA Guidelines*, the Lead Agency or Responsible Agency shall prepare an addendum to a previously certified EIR or adopted negative declaration if some changes or additions are necessary, but none of the changes call for preparation of a subsequent EIR or negative declaration (see *State CEQA Guidelines* Section 15162). Section 15162 of the *State CEQA Guidelines*

lists the conditions that would require the preparation of a subsequent EIR or negative declaration rather than an addendum. These include 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;
- (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
- (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 of 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;
 - (B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - (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
 - (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.

Metropolitan has evaluated the potential environmental impacts of the proposed modifications as outlined in Section 3.0 of this Addendum. As noted in Section 6.0, *Conclusion*, of this Addendum, Metropolitan, acting as the Lead Agency, has determined that none of the conditions described in Section 15162 of the *State CEQA Guidelines* apply, and an addendum is the appropriate environmental documentation for the proposed modifications and fully complies with CEQA and the *State CEQA Guidelines*.

1.3 Summary of Environmental Effects

Section 3.0 of this Addendum presents an analysis of potential environmental impacts related to aesthetics, air quality, biological resources, cultural and historical resources, energy, greenhouse gas (GHG) emissions, hazards and hazardous materials, hydrology and water quality, noise and vibration, transportation and traffic, and wildfire associated with the proposed modifications. For all other resource categories identified in the CEQA Appendix G Checklist (e.g., agriculture and forestry resources, geology and soils, land use and planning, mineral resources, population and housing, public services, recreation, tribal cultural resources, and utilities and service systems), the 2015 EIR found that the Project would either have no impact or a less than significant impact. For these categories, the proposed modifications would not generate new significant environmental effects that were not previously addressed, nor would they substantially increase the severity of previously identified significant effects identified in the Project's original environmental documentation. Therefore, no further written analysis for these categories in this Addendum is required.

The 2015 EIR and Mitigation Monitoring and Reporting Program (MMRP) included mitigation measures for four resource areas – aesthetics, air quality, cultural and historical resources, and noise and vibration - to reduce significant environmental impacts associated with the approved Project to the maximum extent practicable. The currently proposed modifications would be subject to the same adopted mitigation measures, as applicable. Mitigation measures adopted in the 2015 EIR remain unchanged.

This Addendum concludes that the proposed minor design modifications would not change the significance determinations of the 2015 EIR regarding construction and operational impacts on the identified impact categories described above. Also, because analyses of energy and wildfire were not required when the original Project EIR was certified, brief discussions of impacts on these resource categories are included. The proposed modifications to the previously approved Project do not meet any of the conditions that would require the preparation of a subsequent EIR or negative declaration set forth in Section 15162 of the *State CEQA Guidelines* or any of the conditions requiring the preparation of a supplement to an EIR as set forth in Section 15163 of the *State CEQA Guidelines*.

1.4 Incorporation by Reference

The following documents were used in the preparation of this Addendum and are incorporated herein by reference, consistent with Section 15150 of the *State CEQA Guidelines*.

- *Draft Environmental Impact Report for the F. E. Weymouth Water Treatment Plant Improvements Program*. Metropolitan Water District of Southern California. (SCH No. 2013121074), October 2014.
- *Final Environmental Impact Report for the F. E. Weymouth Water Treatment Plant Improvements Program*. Metropolitan Water District of Southern California. (SCH No. 2013121074), April 2015.
- *Draft Environmental Impact Report for the F. E. Weymouth Filtration Plant Ozonation Facilities and Site Improvements Program*. Metropolitan Water District of Southern California. (SCH No. 2004071097), January 2005.
- *Final Environmental Impact Report for the F. E. Weymouth Filtration Plant Ozonation Facilities and Site Improvements Program*. Metropolitan Water District of Southern California. (SCH No. 2004071097), March 2005.

2 Description of the Proposed Modifications

2.1 Background/EIR

In December 2013, Metropolitan published a Notice of Preparation/Initial Study (NOP/IS) for the Project. Metropolitan then prepared an EIR pursuant to CEQA Guidelines Section 15080 et seq. The EIR was circulated from October 21, 2014 through December 4, 2014. As mentioned previously, the EIR was certified by Metropolitan on April 14, 2015. Since that time, Metropolitan has been implementing the Weymouth Improvements Program at the F. E. Weymouth Water Treatment Plant (“Weymouth Plant”). To date, the Solar Generation Facility, Chlorine Systems Upgrades, Domestic and Fire Water System Improvements, Stormwater Management Improvements, and Filter Building No. 1 Rehabilitation projects have been completed. The Basin Nos. 5-8 Rehabilitation, and Seismic Upgrades to the Water Quality Laboratory, Engineering Building, Wash Water Pump Station Improvements, Dry Polymer System Upgrades, Oxidation Demonstration Plant Rehabilitation, and Warehouse projects are the projects that are yet to be implemented.

2.2 Objectives of the Proposed Project Modifications

The objectives for the proposed modifications are the same as the objectives identified in the 2015 EIR. As described in the 2015 EIR, the approved Project has the following objectives:

- Upgrade aging infrastructure to ensure safe drinking water for years to come;
- Install new, more-efficient treatment technologies to meet more stringent drinking water standards;
- Increase and maintain operational flexibility;
- Enhance features of the treatment plant that protect public safety and the environment;
- Improvement stormwater management; and
- Reduce off-site energy demands and lower greenhouse gas emissions.

This Addendum will evaluate the potential impacts to aesthetics, air quality, biological resources, cultural and historical resources, energy, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, noise and vibration, transportation and traffic, and wildfire for the minor project modifications, as described in Section 2.3 (Project Location and Project Description). The proposed modifications would not result in changes to other Project components previously analyzed in the 2015 EIR; therefore, those Project components are not analyzed in this Addendum.

2.3 Project Location and Project Description

2.3.1 Project Location

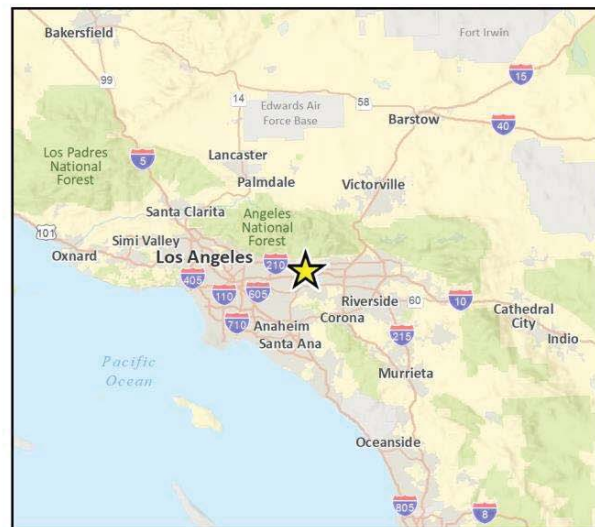
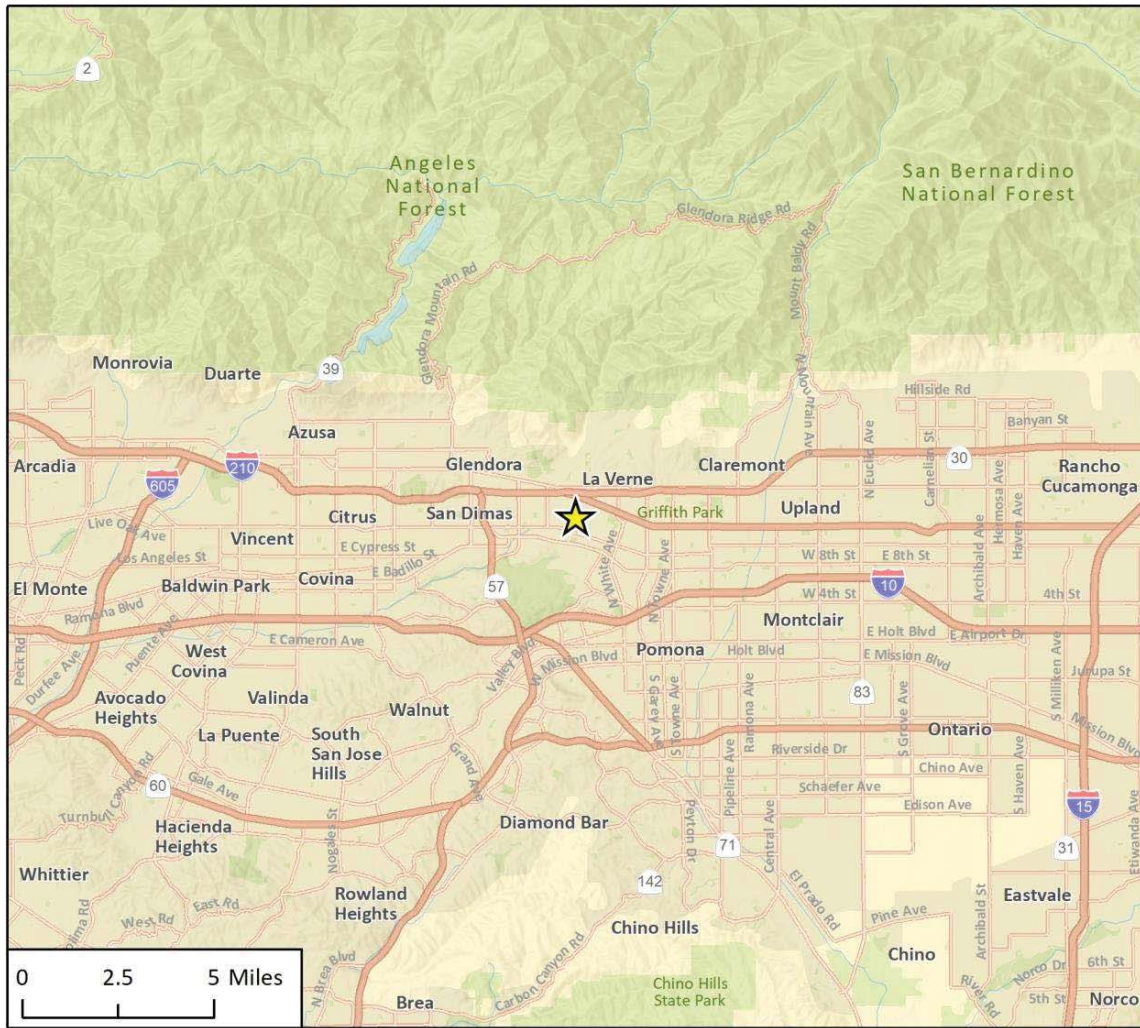
The Project area is generally located within the northern portion of the Weymouth Plant. Basin Nos. 1-4 are located on the northwestern portion of the property just west of Basin Nos. 5-8 and south of Filter Building No. 1 and the associated 24 filter beds. The Electrical Control Building is located immediately south of Basin Nos. 5-8 towards the center of the Weymouth Plant. Other nearby components of the Weymouth Plant include the Oxidation Demonstration Project buildings, Washwater Tanks, Chemical Tank Farm, Washwater Reclamation Plant, and Solids Thickeners to the north; a solar photovoltaic generation facility to the east; and the Administration and Control Building, Chlorine Receiving and Storage Building, and Mechanical Maintenance Shop to the south. The Weymouth Plant is bound by Moreno Avenue to the west, residences to the north and south, and Wheeler Avenue to the east. The regional and local locations of the proposed modifications are depicted in Figure 1 and Figure 2. Figure 3 shows the existing site conditions of the Electrical Control Building and Basin Nos. 1-4.

2.3.2 Project Description

Rehabilitation of Basin Nos. 1-4 would include replacement of eight inlet gates, associated inlet gate actuators and gate guides; two motor control centers (MCCs); two gate power panels; and local control panels as well as installation of a new remote inlet/outlet (I/O) device for extension of the remote terminal

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Figure 1 Regional Location



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Figure 2 Project Location



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Fig. 2 Project Location

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Figure 3 Existing Site Conditions of the Electrical Control Building and Basins 1-4



Photo 1. Western and Southern Elevations of the Electrical Control Building.



Photo 2. Eastern and Northern Elevations of the Electrical Control Building.



Photo 3. Inlet Gates and Associated Actuators at Basin No.1 (Sedimentation Basin), Facing West.



Photo 4. Electrical Equipment at Basin No. 2 (Flocculation Basin), Facing East.

unit (RTU) to accommodate new gate signal and control functions.¹ The replacement inlet gates would be stainless steel. The MCCs and gate power panels would be replaced in the same locations. The replacement upgrades are planned for the first half-plant shutdown.

Electrical components inside the Electrical Control Building will be updated with more efficient technology to operate the upgraded equipment associated with Basins 5-8. The upgrades involve the installation of two MCCs, a wall-mounted air conditioning unit with ¾-inch refrigeration line, the replacement of an RTU, electrical panels, three exterior doors, and windows. The replacement of exterior doors and windows would look similar to the existing doors and windows. Electrical conduits would be installed along the exterior building walls to connect the upgraded RTUs and MCCs. The improvements would also include replacement of the roll-up door with double-swing doors, other railings, and resilient flooring inside the building and installation of removable guardrails for the loading dock.

2.3.3 Construction

Together, these projects and minor modifications are currently undergoing final design and would be constructed from spring 2022 through winter 2024 (an approximately 33-month construction period). The 2015 EIR originally assumed a 12-month construction period for the Basin Nos. 5-8 project; therefore, the proposed modifications would extend this construction schedule by approximately 21 months. The 2005 EIR estimated the Filter Building 2 Valves Replacement project would require approximately 12 months to complete. This project is now proposed to be combined with the Basin Nos 5-8 project and would be constructed during the overall 33-month construction period using similar types and numbers of construction equipment and similar numbers of construction workers as those required for the Basin Nos. 5-8 project.

Consistent with the assumptions of the 2015 EIR, it is anticipated that Project construction would not require the entire F. E. Weymouth Treatment Plant to be shut down for any period of time; however, localized shut-downs would be required and would occur during Project activities. The Project would require several half-plant shutdowns, quarter-plant shutdowns, and minor filter shutdowns. The improvements to the inlet gates and actuators associated with Basins 1-4 and the Electrical Control Building would be constructed during the plant shutdowns.

Construction activities for Basin Nos. 1-4 and the Electrical Control Building would involve the removal of existing infrastructure (e.g., existing inlet gates and associated actuators, electrical panels/components, doors and windows), mechanical work, welding, electrical connections, drilling through concrete walls, and minor concrete patching work. Construction activities would only occur during daytime hours, although the partial plant shutdowns required to implement the proposed modifications would occur on a 24-hour basis. The construction equipment and number of workers required for the minor modifications associated with Basin Nos. 1-4 and the Electrical Control Building would fall within the equipment and worker assumptions of the certified 2005 and 2015 EIRs for the Basin Nos. 5-8 Rehabilitation and the Filter Building 2 Valves Replacement projects, which are summarized in Table 2-1. No additional construction equipment or workers would be required to construct the proposed modifications. Approximately six roundtrip truck trips for hauling off existing infrastructure from the site and transporting new infrastructure to the site would be needed. No soil import or export would be required because no excavation is needed for the proposed modifications.

¹ A remote I/O device is an electronic device that sends and receives input and output signals using transmission technology.

Many of the projects described in the certified 2005 and 2015 EIR are complete, and the remaining projects envisioned by the certified 2005 and 2015 EIRs (e.g., Administration Building Seismic Upgrades, Seismic Upgrades to the Water Quality Laboratory, Engineering Building, Wash Water Pump Station Improvements, Dry Polymer System Upgrades, Oxidation Demonstration Plant Rehabilitation, and Warehouse projects) are in study and design phases and not likely to have an overlapping construction schedule.

Table 2-1. Construction Equipment List

Individual Project	Construction Equipment	Daily On-site Construction Workers
Basin Nos. 5-8 Rehabilitation ¹	Two man lifts, three dump trucks, two semi-truck flatbed trailers, two abrasive blasting equipment, six concrete trucks, four concrete pumps with boom, two concrete saws, TIG and MIG welding equipment, six air compressors, one rubber-tired loader, one excavator, one backhoe, two generators, two portable blowers capable of 50,000 CFM, three forklifts, three 300-ton cranes, and 12 0.5-ton pickup trucks	10
Actuator Valves Replacement ²	One welder	6
Proposed Modifications (inlet gates, actuators, electrical components)	No new construction equipment. Utilize construction equipment from Basin Nos. 5-8 Rehabilitation and Filter Building 2 Valves Replacement projects	No additional construction workers. Utilize same workers from Basin Nos. 5-8 Rehabilitation and Filter Building 2 Valves Replacement projects

Notes: TIG (tungsten inert gas), MIG (metal inert gas), CFM (cubic feet per minute)

¹ Source: 2015 EIR

² Source: Certified 2005 EIR

During construction activities, best management practices (BMPs) from Metropolitan's standard construction specifications would be required to control erosion and limit any run-off discharge. The contractor would also be required to implement appropriate BMPs as part of the Stormwater Pollution Prevention Plan (SWPPP) for projects greater than one acre or implement a Water Pollution Control Plan (WPCP) for projects less than one acre. These would include, but would not be limited to, utilizing secondary containment for oils, paints, and other grease products; containing all trash and debris; installing fiber rolls and filter mesh for storm drains, and utilize sweeper trucks to control dust, during construction activities to prevent sediment transport off the site. The BMPs would be maintained to ensure construction-generated sediment would not leave the plant.

3 Environmental Setting and Analysis

This section presents an analysis of environmental impacts related to aesthetics, air quality, biological resources, cultural and historical resources, energy, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, noise and vibration, transportation and traffic, and wildfire associated with the proposed modifications to the Project.

3.1 Aesthetics

The 2015 EIR prepared for the original Project concluded potential environmental impacts to aesthetics would be less than significant with incorporation of Mitigation Measure AES-1, which requires the installation of vegetative barriers for screening adjacent to the solar photovoltaic generation facility. This section provides an analysis of the potential aesthetic impacts associated with the proposed modifications to the Project.

3.1.1 Setting

As described in the 2015 EIR, the Project site is largely visible from neighboring residences and adjacent streets, although certain existing features on site are partially or fully obscured by fencing, walls, and vegetation screening along the perimeters of the Weymouth Plant. The Electrical Control Building is located in the central portion of the Project site and is not visible from off-site vantage points. Basin Nos. 1-4 are located on the western portion of the Project site and are primarily obscured from off-site views by perimeter fencing along Moreno Avenue.

3.1.2 Significance Threshold Criteria

The following CEQA significance threshold criteria were used to evaluate impacts to aesthetics associated with the proposed modifications to the Project. Impacts would be potentially significant if the proposed modifications would introduce new significant impacts or substantially increase the severity of previously identified significant impacts associated with:

- a) A substantial adverse effect on a scenic vista
- b) Substantial damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway
- c) In an urbanized area, a conflict with applicable zoning and other regulations governing scenic quality
- d) Creation of a new source of substantial light or glare which would adversely affect day or nighttime views in the area

The 2015 EIR focused on evaluating impacts related to visual character and quality and light and glare (questions [c, d] of the *State CEQA Guidelines* Appendix G checklist) because the NOP/IS determined that implementation of the original Project would not result in significant impacts to scenic vistas or damage scenic resources or historic buildings within a State scenic highway (questions [a, b]). Consequently, questions related to scenic vista or scenic resources will not be discussed in this Addendum.

3.1.3 Potential Impacts

Visual Character

The 2015 EIR concluded that the northern Solar Generation Project included in the original Project would result in significant impacts to the visual character and quality of the project site as viewed from Wheeler Avenue and Pelota Park. Therefore, implementation of Mitigation Measure AES-1 was required, which was determined to reduce impacts to a less-than-significant level.

AES-1 Prior to installation of the solar panels for the northern Solar Generation Project, Metropolitan shall verify that vegetative barriers installed along the perimeter fences of the Weymouth Plant adjacent to the solar facility shall be sufficient to screen views of the solar panel arrays from Wheeler Avenue and Pelota Park. Metropolitan shall replace and actively maintain any vegetation that has died or provide alternative screening options at a similar height.

The proposed modifications to the Project are located in the city of La Verne. Pursuant to California Government Code 53091(d) and (e), the original Project and the proposed modifications would not be subject to the design review policies contained in the City's zoning regulations. Local zoning and building ordinances do not apply to the location or construction of facilities for the production, generation, storage, treatment, or transmission of water. Furthermore, construction activities for the proposed modifications would require similar activities and equipment as those previously evaluated in the 2015 EIR and would therefore result in similar less-than-significant impacts to visual character and quality at the Project site. The Electrical Control Building is not visible from off-site vantage points; therefore, alterations to its appearance would not result in adverse impacts to visual character and quality. In addition, the appearance of the control gates in Basin Nos. 1-4 after implementation of the proposed modifications would remain largely the same as under existing conditions; therefore, no adverse impacts to visual character and quality would occur as a result of rehabilitation activities. As a result, the proposed modifications would not result in new or substantially more severe significant impacts related to visual character and scenic quality. This impact would be less than significant, consistent with the 2015 EIR. Implementation of Mitigation Measure AES-1, which is specifically relevant to the northern Solar Generation Project, which has already been constructed, would not be required for the proposed modifications.

Light and Glare

The 2015 EIR determined construction and operation of the original Project would not result in the creation of a new source of substantial light or glare that would adversely affect day or nighttime views in the area. Construction activities for the proposed modifications to the Project would not require nighttime lighting and would not include components that generate glare. Upon completion, the proposed modifications would not result in new sources of light or glare because they involve replacement and rehabilitation of existing infrastructure as well as minor additions of electrical and mechanical components. Therefore, the proposed modifications would not result in new or substantially more severe significant impacts related to light and glare. This impact would be less than significant, consistent with the 2015 EIR.

3.1.4 Conclusion

The proposed modifications to the Project would not result in new significant impacts to aesthetics or substantially increase the severity of impacts already identified in the 2015 EIR. Impacts would be similar

to those determined in the 2015 EIR. Therefore, impacts to aesthetics would be less than significant, and no further mitigation is required.

3.2 Air Quality

The 2015 EIR prepared for the original Project concluded potential environmental impacts to air quality would be significant and unavoidable after the incorporation of Mitigation Measure AQ-1, which requires the use of construction equipment equipped with certified Tier 4 engines, when feasible, Tier 3 equipment with the highest level available emission control equipment where Tier 4 equipment is not commercially available, and Tier 2 equipment with the highest level available emission control equipment where Tier 3 equipment is not available. This section provides an analysis of the potential air quality impacts associated with the proposed modifications to the Project.

3.2.1 Setting

As described in the 2015 EIR, the Project site is located in the South Coast Air Basin (Basin), which is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD monitors levels of ozone, carbon monoxide, nitrogen dioxide, sulfur oxide, suspended particulates, and lead in the Basin and compares the concentrations of those pollutants to State and federal standards.

The Basin is in non-attainment for the federal standards for ozone and particulate matter less than 2.5 microns in diameter (PM_{2.5}), as well as lead in Los Angeles County only. Also, the Basin is in non-attainment for the State standards for ozone, particulate matter less than 10 microns in diameter (PM₁₀), and particulate matter less than 2.5 microns in diameter (PM_{2.5}) (SCAQMD 2016). The nonattainment status is a result of several factors, the primary ones being the naturally adverse meteorological conditions that limit the dispersion and diffusion of pollutants, the limited capacity of the local airshed to eliminate pollutants from the air, and the number, type, and density of emission sources within the Basin.

The SCAQMD considers air quality sensitive receptors to be residences, hospitals, convalescent facilities, and other places where it is possible for an individual to remain for 24 hours. Commercial and industrial facilities are not considered sensitive (SCAQMD 2008a). The closest sensitive receptors to the locations of the proposed modifications are residences located immediately to the west across Moreno Avenue, approximately 140 feet west of Basin Nos. 1-4 and 770 feet west of the Electrical Control Building.

3.2.2 Significance Threshold Criteria

The following CEQA significance threshold criteria were used to evaluate impacts to air quality associated with the proposed modifications to the Project. Impacts would be potentially significant if the proposed modifications would introduce new significant impacts or substantially increase the severity of previously identified significant impacts associated with:

- a) A conflict with or obstruction of implementation of the applicable air quality plan
- b) 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
- c) Exposure of sensitive receptors to substantial pollutant concentrations
- d) Other emissions (such as those leading to odors) adversely affecting a substantial number of people

Metropolitan has not developed specific air quality thresholds for air quality impacts. However, as stated in Section 15064.7(c-d) as well as Appendix G of the *State CEQA Guidelines*, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the above determinations. As such, because of the SCAQMD's regulatory role in the Basin, the significance thresholds and analysis methodologies in the SCAQMD's *CEQA Air Quality Handbook* (1993) and *Air Quality Analysis Handbook* (2021) are used to evaluate project impacts.

As shown in Table 3.2-1, the SCAQMD provides significance thresholds to determine the potential impacts of the proposed modifications under CEQA Appendix G significance thresholds b) and c). These thresholds are the same as those applied in the 2015 EIR.

Table 3.2-1. SCAQMD Regional Air Quality Significance Thresholds

Mass Daily Thresholds		
Pollutant	Construction	Operation
Nitrogen Oxides	100 lbs/day	55 lbs/day
Volatile Organic Compounds	75 lbs/day	55 lbs/day
PM ₁₀	150 lbs/day	150 lbs/day
PM _{2.5}	55 lbs/day	55 lbs/day
Sulfur Oxides	150 lbs/day	150 lbs/day
Carbon Monoxide	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants and Odor Thresholds		
Toxic Air Contaminants (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden >0.5 excess cancer cases (in areas ≥ 1 in 1 million) Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
Greenhouse Gases	10,000 MT/yr CO ₂ e for industrial facilities	
Ambient Air Quality for Criteria Pollutants		
Nitrogen Dioxide	SCAQMD is in attainment; the project is significant if it causes or contributes to an exceedance of the following attainment standards:	
1-hour Average	0.18 ppm (state)	
Annual Arithmetic Mean	0.03 ppm (state) and 0.0534 ppm (federal)	
PM₁₀	10.4 µg/m ³ (recommended for construction) and 2.5 µg/m ³ (operation)	
24-hour Average	1.0 µg/m ³	
Annual Average		
PM_{2.5}	10.4 µg/m ³ (construction) and 2.5 µg/m ³ (operation)	
Sulfur Dioxide	0.25 ppm (state) & 0.075 ppm (federal – 99 th percentile)	
1-hr Average	0.04 ppm (state)	
24-hr Average		
Sulfate	25 ug/m ³ (state)	
24-hour Average		
Carbon Monoxide	SCAQMD is in attainment; the project is significant if it causes or contributes to an exceedance of the following attainment standards:	
1-hour Average	20 ppm (state) and 35 ppm (federal)	
8-hour Average	9.0 ppm (state/federal)	
Lead		

Table 3.2-1. SCAQMD Regional Air Quality Significance Thresholds

30-day Average	1.5 ug/m ³ (state)
Rolling 3-month Average	0.15 ug/m ³ (federal)

Notes: SCAQMD (South Coast Air Quality Management District), lbs (pounds), PM₁₀ (particulate matter measuring 10 microns or less in diameter), PM_{2.5} (particulate matter measuring 2.5 microns or less in diameter), ≥ (greater than or equal to), MT = metric tons, yr (year), CO_{2e} (carbon dioxide equivalents), hr (hour), ppm (parts per million), ug/m³ (micrograms per cubic meter).

Source: SCAQMD 2019

3.2.3 Potential Impacts

Conflict with Air Quality Plan

Generally, to be consistent with an Air Quality Management Plan (AQMP), a project must not result in or contribute to an exceedance of the growth forecasts in the applicable plan(s). The 2015 EIR determined the original Project was consistent with SCAQMD's 2012 AQMP because it involved upgrades to existing facilities and construction of new facilities at the Weymouth Plant to improve the plant's water treatment process that would not directly or indirectly induce population growth. Since that time, the SCAQMD has adopted the 2016 AQMP, which incorporates new scientific data and notable regulatory actions that have occurred since adoption of the 2012 AQMP, including the approval of the new federal eight-hour ozone standard of 0.070 parts per million that was finalized in 2015. The 2016 AQMP builds upon the approaches taken in the 2012 AQMP for the attainment of federal particulate matter and ozone standards and highlights the significant amount of reductions to be achieved. The 2016 AQMP also demonstrates strategies for attainment of the new federal eight-hour ozone standard and vehicle miles travelled emissions offsets from technology improvements and transportation strategies, pursuant to United States Environmental Protection Agency requirements (SCAQMD 2017).

The 2015 EIR determined the original Project would not conflict with the applicable AQMP, which at the time was the SCAQMD's 2012 AQMP. Similar to the original Project, the proposed modifications would involve the rehabilitation and replacement of components of existing facilities and the installation of new facilities that improve the operational efficiency of the Weymouth Plant. As such, the proposed modifications are not land use development projects with housing that would induce population growth and would not generate new employment opportunities at Metropolitan. In addition, construction workers for the proposed modifications would be a similar-sized workforce as that analyzed in the 2015 EIR. The proposed modifications are therefore consistent with the 2016 AQMP. Construction of the proposed modifications would not increase the population of the area and therefore would not conflict with the emissions forecasts contained in the 2016 AQMP. As a result, the proposed modifications would not conflict with the AQMP, and no impact would occur, consistent with the 2015 EIR.

Air Quality Standards and Cumulative Increase of Criteria Pollutants

The 2015 EIR concluded the original Project's construction-related emissions would exceed the SCAQMD regional significance threshold for nitrogen oxides. Therefore, implementation of Mitigation Measure AQ-1 was required. However, the 2015 EIR determined that incorporation of Mitigation Measure AQ-1 (below) would not reduce the original Project's air quality impacts to a less-than-significant level because construction-related emissions of nitrogen oxides would still exceed the SCAQMD regional significance threshold. As such, the 2015 EIR concluded that construction impacts related to air quality standards and the cumulative increase of criteria air pollutant emissions would be significant and unavoidable.

AQ-1 All construction equipment shall meet or exceed Environmental Protection Agency Tier 4 emission standards when feasible. The contractor shall be required to document efforts to utilize equipment meeting Tier 4 emission standards including providing justification when using Tier 4 certified or better equipment is not feasible. In the event Tier 4 equipment is not commercially available, contractor shall require Tier 3 equipment with the highest level available emission control equipment. In the event Tier 3 equipment is not available, contractor shall require Tier 2 equipment with the highest level available emission control equipment.

This mitigation measure was implemented during construction of the components of the original Project that have already been completed and will be implemented during construction of the remaining components of the original Project.

The proposed modifications, similar to the original Project activities analyzed under the 2015 EIR, would require construction activities that would generate temporary air pollutant emissions. Exhaust emissions such as particulate matter, carbon monoxide, nitrogen oxides, and volatile organic compounds associated with truck trips, haul trips, and diesel construction equipment would potentially degrade air quality. The air emissions modeling conducted for the original Project estimated the maximum daily air pollutant emissions associated with buildout of several Project components concurrently. Exceedances of the SCAQMD regional significance threshold for nitrogen oxide were estimated to occur during simultaneous construction of the Dry Polymer System Upgrades, Basin Nos. 5-8 Refurbishment, Stormwater Management Improvements, Solar Generation Project, Domestic and Fire Water System Improvements, and Seismic Upgrades as well as during simultaneous construction of the Dry Polymer System Upgrades, Basin Nos. 5-8 Refurbishment, Stormwater Management Improvements, Domestic and Fire Water System Improvements, Seismic Upgrades, Oxidation Demonstration Plant Rehabilitation, and Chlorine System Upgrades.

As discussed in Section 2.3.3, *Construction*, construction of the proposed modifications would require use of similar construction equipment and number of construction workers on a daily basis as anticipated by the certified 2005 and 2015 EIRs for the Basin Nos. 5-8 Rehabilitation project and the Filter Building 2 Valves Replacement project. Therefore, maximum daily air pollutant emissions associated with on-site construction equipment usage and construction worker trips would be the same as those estimated in the certified 2005 and 2015 EIRs for the Basin Nos. 5-8 Rehabilitation project and the Filter Building 2 Valves Replacement project, which are summarized in Table 3.2-2. The proposed modifications would also require six total additional roundtrip truck trips for removing existing infrastructure from the site and transporting new infrastructure to the site, which would equate to approximately one roundtrip truck trip per day for six days over the 18-month duration of construction activities. Emissions generated by one additional daily roundtrip truck trip would be *de minimis* and would not contribute substantially to overall daily emissions generated during construction activities. As shown in Table 3.2-2, maximum daily emissions would not exceed SCAQMD thresholds for criteria pollutants, and impacts would be less than significant because simultaneous construction activities for the Basin Nos. 5-8 Rehabilitation project, the Filter Building 2 Valves Replacement project, and the proposed modifications would be less intensive than those construction activities estimated to potentially occur concurrently in the 2015 EIR. Therefore, impacts related to air quality standards and the cumulative increase of criteria pollutants for the proposed modifications would be less than previously identified in the 2015 EIR and would be less than significant. Nevertheless, implementation of Mitigation Measure AQ-1 would continue to be required for the original Project and the proposed modifications, consistent with the 2015 EIR. Therefore, the proposed modifications would not result in new or substantially more severe significant impacts related to criteria air pollutant emissions generated by construction activities.

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Table 3.2-2. Estimated Unmitigated Regional Daily Construction Emissions

Project Component	Emissions (pounds per day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Basin Nos. 5-8 Refurbishment ^{1, 2}	5	24	39	<1	2	2
Actuator Valves Replacement ^{2, 3}	3	2	5	<1	6	6 ⁴
Maximum Daily Emissions	8	26	44	<1	8	8
<i>SCAQMD Regional Thresholds</i>	<i>75</i>	<i>100</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
Threshold Exceeded?	No	No	No	No	No	No

Notes: VOC (volatile organic compounds), NO_x (nitrogen oxides), CO (carbon monoxide), SO_x (sulfur oxides), PM₁₀ (particulate matter measuring 10 microns or less in diameter), PM_{2.5} (particulate matter measuring 2.5 microns or less in diameter), SCAQMD (South Coast Air Quality Management District).

¹ Source: Table 3-5 of Appendix B of the 2015 EIR

² Includes emissions generated by operation of off-road construction equipment and construction worker, vendor, and haul truck trips.

³ Source: Tables B-3 and B-4 in Appendix B of the certified 2005 EIR

⁴ PM_{2.5} emissions were assumed to be equivalent to PM₁₀ emissions for the Filter Building 2 Valves Replacement project, which is conservative given that PM_{2.5} is a subset of PM₁₀.

Upon completion, the proposed modifications would not require additional operations and maintenance activities beyond those currently occurring at the Weymouth Plant, similar to the projects contemplated in the 2015 EIR. Therefore, no new operational emissions of criteria air pollutants would be generated, and the proposed modifications would not result in new or substantially more severe significant operational impacts related to criteria air pollutant emissions. This impact would be less than significant, consistent with the 2015 EIR.

Exposure of Sensitive Receptors to Pollutant Concentrations

Carbon Monoxide Hotspots

A carbon monoxide hotspot is a localized concentration of carbon monoxide that is above a carbon monoxide ambient air quality standard. Localized carbon monoxide hotspots can occur at intersections with heavy peak hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that the local carbon monoxide concentration exceeds the federal one-hour standard of 35.0 parts per million or the federal and state eight-hour standard of 9.0 parts per million. As stated in the 2015 EIR, the SCAQMD recommends a carbon monoxide hotspot evaluation of potential localized carbon monoxide impacts when a project would increase the volume-to-capacity (V/C) ratios by two percent at intersections with a level of service (LOS) of D or worse. The SCAQMD also recommends a carbon monoxide hotspot evaluation when a project would decrease the LOS of an intersection by one level beginning when LOS changes from C to D. The 2015 EIR determined the original Project would not exceed the SCAQMD screening criteria at intersections in proximity to the Project site and therefore would not create carbon monoxide hotspots.

Similar to the original Project, the proposed modifications would not result in new vehicle trips to and from the project site during operational activities that would have the potential to increase the V/C ratio or decrease the LOS of nearby intersections. Accordingly, the proposed modifications would not result in an

exceedance of the SCAQMD screening criteria for carbon monoxide hotspots at the Project site. Therefore, the proposed modifications would not result in new or substantially more severe significant impacts related to carbon monoxide hotspots. This impact would be less than significant, consistent with the 2015 EIR.

Localized Construction Emissions – Criteria Air Pollutants

Localized construction emissions of criteria air pollutants include equipment exhaust and fugitive dust generated by on-site construction activities. The 2015 EIR determined the original Project would not generate substantial localized emissions of criteria air pollutants during construction activities in excess of SCAQMD thresholds. As discussed in Section 2.3.3, *Construction*, construction of the proposed modifications would require use of similar construction equipment and a similar number of construction workers as anticipated by the 2015 EIR. The proposed modifications would require six total additional roundtrip truck trips for removing existing infrastructure from the site and transporting new infrastructure to the site; however, emissions generated by the additional truck trips would be emitted off-site and therefore are not considered localized on-site emissions. Because the proposed modifications would not require the use of additional on-site construction equipment beyond that analyzed in the 2015 EIR, localized construction emissions of criteria air pollutants would be similar to or less than those estimated for the original Project, which the 2015 EIR determined would not exceed the SCAQMD thresholds. Therefore, the proposed modifications would not result in new or substantially more severe significant impacts related to localized emissions of criteria air pollutants. This impact would be less than significant, consistent with the 2015 EIR.

Localized Construction Emissions – Toxic Air Contaminants

The 2015 EIR determined the original Project would not generate substantial localized emissions of toxic air contaminants during construction activities. Construction of the proposed modifications would result in temporary emissions of diesel particulate matter (DPM) exhaust emissions, which are toxic air contaminant emissions, from off-road, heavy-duty diesel equipment. Generation of DPM from construction projects typically occurs in a single area for a short period. Construction of the proposed modifications would occur over approximately 18 months. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the Maximally Exposed Individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period of time. According to the California Office of Environmental Health Hazard Assessment and SCAQMD methodology, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project. Thus, the duration of proposed construction activities (i.e., 18 months) is approximately two percent of the total exposure period used for 70-year health risk calculations. As a result, similar to the original Project, the proposed modifications would not result in a long-term (i.e., 70 years) source of toxic air contaminant emissions. No residual emissions and corresponding individual cancer risk are anticipated after construction of the proposed modifications is completed. Therefore, the proposed modifications would not result in new or substantially more severe significant impacts related to toxic air contaminant emissions during construction activities. This impact would be less than significant, consistent with the 2015 EIR.

Localized Operational Emissions – Toxic Air Contaminants

The 2015 EIR determined the original Project would not generate substantial localized emissions of toxic air contaminants during operation. Upon completion, the proposed modifications would not require additional operations and maintenance activities beyond those currently occurring at the Weymouth Plant. Therefore, the proposed modifications would not result in new or substantially more severe significant impacts related to toxic air contaminant emissions generated during operational activities. This impact would be less than significant, consistent with the 2015 EIR.

Objectionable Odors

As discussed in the 2015 EIR, the existing Weymouth Plant does not emit adverse odors, and the original Project includes upgrades to existing facilities and construction of new facilities at the Weymouth Plant to improve the plant's water treatment process, which would not emit adverse odors. Construction activities associated with the proposed modifications may result in temporary odors, such as those associated with use of gasoline and diesel fuel used to power construction equipment and generators. These odor sources would be temporary in nature, generally confined to the immediate area surrounding the Project site, and typical of other construction projects using similar equipment in the region. The proposed modifications would not include any additional odor-generating sources during operation. Therefore, the proposed modifications would not introduce new odor impacts and would not result in a new or substantially more severe significant impact than what was previously analyzed in the 2015 EIR.

3.2.4 Conclusion

The proposed modifications to the Project would not result in new significant impacts to air quality or substantially increase the severity of impacts already identified in the 2015 EIR. Unlike the construction scenarios evaluated in the 2015 EIR for the original Project, maximum daily emissions associated with construction of the proposed modifications in conjunction with the Basin Nos. 5-8 Rehabilitation project and the Filter Building 2 Valves Replacement project would not exceed the SCAQMD regional significance thresholds. Therefore, impacts related to air quality standards and the cumulative increase of criteria pollutants for the proposed modifications would be less than previously identified in the 2015 EIR and would be less than significant. Implementation of Mitigation Measure AQ-1 would continue to be required for the original Project and would also be applied to the proposed modifications.

3.3 Biological Resources

The 2015 EIR prepared for the original Project concluded impacts to biological resources would be less than significant. This section provides an analysis of the potential biological resource impacts associated with the proposed modifications to the Project.

3.3.1 Setting

A site-specific biological survey of the entire Weymouth Plant was conducted in 2014. Plants observed consisted mainly of ornamental trees and shrubs and are generally located along the perimeter of the site. These were planted either to provide screening from the surrounding residential neighborhood or as part of the landscape design of the surrounding buildings. Trees observed within the Weymouth Plant include coast live oak (*Quercus agrifolia*), sycamore (*Platanus racemosa*), camphor (*Cinnamomum camphor*), bottlebrush (*Callistemon* sp.), palo verde (*Parkinsonia* sp.), cypress (*Cupressus* sp.), acacia (*Acacia* sp.), and olive trees (*Olea* sp.). Wildlife species observed during the survey included house finch (*Carpodacus mexicanus*), killdeer (*Charadrius vociferous*), northern flicker (*Colaptes auratus*), American crow

(*Corvus brachyrhynchos*), barn swallow (*Hirundo rustica*), California gull (*Larus californicus*), California towhee (*Melospiza crissalis*), northern mockingbird (*Mimus polyglottos*), savannah sparrow (*Passerculus sandwichensis*), bushtit (*Psaltiriparus minimus*), black phoebe (*Sayornis nigricans*), yellow-rumped warbler (*Setophaga coronata*), lesser goldfinch (*Spinus psaltria*), American goldfinch (*Spinus tristis*), mourning dove (*Zenaidura macroura*) and white-crowned sparrow (*Zonotrichia leucophrys*). The entire plant was surveyed in 2014, and no special-status wildlife species were observed during the survey. Wildlife observed during the survey were generally localized to the perimeter of the plant where trees are present. The 2015 EIR determined that there is a low to no potential for special-status species to occur on the Project site based on the field survey, literature review, institutional knowledge of the water treatment facility and due to a lack of suitable habitat.

The proposed modifications are located on the northwestern portion of the Weymouth Plant. The Electrical Control Building is surrounded entirely by paved surfaces and facility infrastructure. Some low-lying ornamental vegetation and shrubs are located adjacent to Basin Nos. 1-4 to the west and south; however, the majority of Basin Nos. 1-4 is surrounded by paved surfaces and facility infrastructure.

3.3.2 Significance Threshold Criteria

The following CEQA significance threshold criteria were used to evaluate impacts to biological resources associated with the proposed modifications to the Project. Impacts would be potentially significant if the proposed modifications would introduce new significant impacts or substantially increase the severity of previously identified significant impacts associated with:

- a) An 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 Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS)
- b) An adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS
- c) An adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means
- d) Interference with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impeding the use of native wildlife nursery sites
- e) A conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
- f) A conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plans

The 2015 EIR focused on evaluating impacts related to special status species and conflicts with local policies or ordinances protecting biological resources (questions [a, e] of the *State CEQA Guidelines* Appendix G checklist) because the NOP/IS determined implementation of the original Project would not result in significant impacts to riparian habitat and other sensitive natural communities, protected wetlands, wildlife movements and corridors, and Habitat Conservation Plans and Natural Community Conservation Plans (questions [b, c, d, f]). Consequently, these questions will not be discussed further in this Addendum.

3.3.3 Potential Impacts

Special Status Species

As discussed in the 2015 EIR, the Weymouth Plant contains no native habitat with a few mature trees located on the perimeter of the facility. However, based on the field survey, literature review, and lack of suitable habitat, the 2015 EIR determined special-status species have a low to no potential to occur on the Project site. The proposed modifications would be constructed within the boundaries of the Weymouth Plant and would not result in direct impacts to special-status species. This impact would be less than significant, consistent with the 2015 EIR. Therefore, the proposed modifications would not result in new or substantially more severe significant impacts related to special-status species.

While not considered special-status species, common migratory birds and active bird nests (i.e., nests with eggs or young being attended by one or more adults), which are protected by the Migratory Bird Treaty Act and the California Fish and Game Code Sections 3503 and 3513, could occur in the mature trees or in suitable ground substrate on the Project site. Construction activities that result in the removal or destruction of an active bird nest would be a conflict with state and federal laws. Additionally, construction within proximity to active nests could potentially disrupt nesting activity due to disturbance and noise from heavy equipment and human presence. Disruption of nesting activity that results in the death of eggs or young would also be a conflict with state and federal laws. In compliance with the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503 and 3513, if any construction work is to be initiated within the nesting period for migratory birds (generally from February 15 through September 15), a preconstruction survey of active nests for migratory birds would be conducted and avoidance buffers would be established around active nests pursuant to Metropolitan's standard environmental construction specification and practice. No potential impacts to nesting birds are anticipated during the construction of the proposed project due to the minimal amount of potential habitat present within the Project site. Additionally, upon completion, the proposed modifications would not require additional operations and maintenance activities beyond those currently occurring at the Weymouth Plant. Therefore, the impact would be less than significant, consistent with the 2015 EIR and the proposed modifications would not result in new or substantially more severe significant impacts related to migratory birds.

Local Policies

As discussed in the 2015 EIR, pursuant to California Government Code Sections 35091(d) and (e), the building and zoning ordinances of a county or city do not apply to the location or construction of facilities for the production, storage, or transmission of water, wastewater, or electrical energy by a local agency. Therefore, the original Project was determined to be exempt from the City of La Verne's tree preservation ordinance contained within the City of La Verne's zoning code in La Verne Municipal Code Chapter 18.78, Preservation. Similar to the original Project, the proposed modifications are also related to the production, storage, and transmission of water by Metropolitan and are therefore also exempt from compliance with the City of La Verne's tree preservation ordinance. Therefore, the proposed modifications would not result in new or substantially more severe significant impacts related to local policies and ordinances protecting biological resources. This impact would be less than significant, consistent with the 2015 EIR.

3.3.4 Conclusion

The proposed modifications to the Project would not result in new significant biological resource impacts or substantially increase the severity of impacts already identified in the 2015 EIR. Impacts would be

similar to those identified in the 2015 EIR. Therefore, impacts to biological resources would be considered less than significant, and no further mitigation is required.

3.4 Cultural and Historical Resources

The 2015 EIR prepared for the original Project concluded impacts to cultural resources would be less than significant with the incorporation of Mitigation Measures CUL-1 and CUL-2, which require photo-documentation to Historic American Engineering Record (HAER) standards and installation of an on-site exhibit or display to address historic resource impacts related to the Filter Rehabilitation project and Basin Nos. 5-8 Rehabilitation project. This section provides an analysis of the potential impacts to cultural resources associated with the proposed modifications to the Project.

3.4.1 Setting

As discussed in the 2015 EIR, the Project site is located in the city of La Verne within the San Gabriel Valley. The Project site is located in an area that has been extensively disturbed through construction of the Weymouth Plant. Initially developed in 1941, the Weymouth Plant contains the Weymouth Water Treatment Plant Historic District (historic district). Pursuant to the *Cultural Resource Treatment Plan for the Weymouth Water Treatment Plant Historic District (CRTP)*, City of La Verne, Los Angeles County, California (2016) and the 2015 EIR, the historic district is eligible for listing in the National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR) under Criteria A/1 for its association with the Colorado River Aqueduct; under Criteria B/2 for its association with the productive life of F.E. Weymouth, Chief Engineer for Metropolitan from 1920 to 1941; and under Criteria C/3 for its embodiment of the Spanish Colonial/Mission Revival style of architecture. As a property that is eligible for inclusion in the NRHP and CRHR, the historic district is considered a historical resource pursuant to Public Resources Code Section 21084.1.

3.4.2 Significance Threshold Criteria

The following CEQA significance threshold criteria were used to evaluate impacts to cultural resources associated with the proposed modifications to the Project. Impacts would be potentially significant if the proposed modifications would introduce new significant impacts or substantially increase the severity of previously identified significant impacts associated with:

- a) A substantial adverse change in the significance of a historical resource pursuant to Section 15064.5 of the *State CEQA Guidelines*
- b) A substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the *State CEQA Guidelines*
- c) Disturbance of any human remains, including those interred outside of formal cemeteries

In addition to the thresholds described above, Section 3.4, *Cultural and Historical Resources*, of the 2015 EIR included an evaluation of impacts to paleontological resources under the following threshold:

- d) Directly or indirectly destroying a unique paleontological resource or site or unique geologic feature

Updates to the *State CEQA Guidelines* that took effect on December 28, 2018 re-categorized evaluation of impacts to paleontological resources under the Geology and Soils resource. However, for consistency with the 2015 EIR, impacts to paleontological resources are also evaluated in this section.

The 2015 EIR focused on evaluating impacts related to historic resources, archaeological resources, and human remains (questions [a, b, c] of the *State CEQA Guidelines* Appendix G checklist) because the NOP/IS determined that implementation of the original Project would not result in significant impacts to paleontological resources (question [d]). Consequently, the question related to paleontology will not be discussed further in this Addendum.

3.4.3 Project Impacts

Historical Resources

The 2015 EIR concluded the Project would result in significant impacts to elements of the historic district due to changes to filter basin elements as part of the Filter Rehabilitation Project and changes to mechanical equipment in Basin Nos. 5-8 as part of the Basin Nos. 5-8 Rehabilitation Project. Therefore, implementation of Mitigation Measures CUL-1 and CUL-2 was required, which was determined to reduce impacts to a less-than-significant level.

CUL-1 Photo-documentation to HAER Standards

- (a) Prior to construction, Metropolitan will document the history of the resource's technology at HAER Standards Level 2 (compilation of historical plans, as-built drawings, photographs, and contractor specifications; for further detail see <https://www.nps.gov/hdp/standards/haerguidelines.htm>).² Prior to the loss of original material (whether visible from the surface or representing character-defining engineered aspects of the Weymouth Plant) will be taken to depict their visual setting and existing condition, using large-format photography (4 x 5 inch or greater). Photo-documentation will be guided by a qualified architectural historian.
- (b) During and after construction, photographs will be taken to depict the demolition, new construction, and completed work of the project components, using 35-mm photography or larger.
- (c) After construction, the collected documentation will be combined into a HAER-like documentation package (using HAER documentation and formatting) and will be maintained at Metropolitan's Headquarters. This documentation effort will be guided by a qualified architectural historian and documentation will be available for research as appropriate, with consideration given to the security of Metropolitan's facilities.

CUL-2 On-site Exhibit or Display

- (a) An on-site interpretative display will be prepared to illustrate the evolution of the design change in filter cells technology over time. The display will depict the original filter cell design, construction, and modifications made as technology changed between 1941 to present.
- (b) An example of each distinct actuator type (those south of Filter Building No. 2 and south of Basins 5 to 8) of the period of significance will be retained for display on the grounds of the Weymouth Plant.

To evaluate potential impacts that could occur to historic resources as a result of the proposed modifications, Rincon Consultants, Inc. (Rincon) prepared a historical resources technical memorandum

² The weblink provided in the 2015 EIR is no longer active and has been updated here.

in August 2021, which is included as Appendix A. The following impacts analysis is based on the findings of this technical memorandum.

Basin Nos. 1-4

The proposed modifications include the replacement of eight inlet gates and associated actuators, and gate guides, two MCCs, two gate power panels, and local control panels as well as installation of a new remote I/O device. These modifications are consistent with Project elements proposed for the Basin Nos. 5-8 Rehabilitation project and analyzed in the 2015 EIR. Basin Nos. 1-4 were part of the original 1939 Plant construction. Basin Nos. 5-8 were part of the 1962 Plant Expansion No. 2 construction. As described in the CRTP, all eight basins are contributing elements to the historic district, and the analysis presented in the 2015 EIR concluded the following impacts would occur as a result of the replacement of the basin gates and gate guides for Basin Nos. 5-8:

The inlet gates are engineered elements critical to the operation of the filtration [treatment] process. While not visible from the surface, they are a significant design component. Removal and replacement of the inlet gates would result in the removal and replacement of original material, although the design and operation of the inlet gates will not change substantially. Nonetheless, the proposed improvements have the potential to cause an adverse change in the significance of the historic resource.

To address these potential impacts to Basin Nos. 5-8, the 2015 EIR required implementation of Mitigation Measures CUL-1 and CUL-2 and determined implementation of these mitigation measures would reduce impacts to Basin Nos. 5-8 to a less-than-significant level.

Similar to Basin Nos. 5-8, the inlet gates gate guides, and associated control panels for Basin Nos. 1-4 are character-defining features. The inlet gates and gate guides are original to the Weymouth Plant's original design and construction and represent intact historic fabric. The replacement of these internal components would have the potential to result in a significant adverse change in the significance of a historical resource due to the replacement of engineered elements and loss of original material. Implementation of Mitigation Measure CUL-1 would be required for the proposed modifications to address this potentially significant impact through photo-documentation to HAER standards. However, because the associated actuators at Basin Nos. 1-4 were replaced in the 1970s and therefore fall outside of the period of significance of the historic district, the actuators are not considered character-defining features of Basin Nos. 1-4, and no historic impacts related to these components would occur. As such, implementation of Mitigation Measure CUL-1 is not recommended for these components. Furthermore, Mitigation Measure CUL-2 was only required to address impacts to filter cells and the "period actuators" of Basin Nos. 5-8 and would not be required for the proposed modifications because the inlet gate actuators associated with Basin Nos. 1-4 have been replaced and modified since the Plant's original construction in 1939.

The 2015 EIR concluded implementation of Mitigation Measure CUL-1 would reduce impacts associated with the replacement of the inlet gates and gate guides of Basin Nos. 5-8 to a less-than-significant level. Similarly, implementation of Mitigation Measure CUL-1 to Basin Nos. 1-4 would mitigate historic resource impacts to Basin Nos. 1-4 a less-than-significant level. Therefore, the proposed modifications related to Basin Nos. 1-4 would not result in new or substantially more severe significant impacts related to historic resources. This impact would be less than significant with mitigation incorporated, consistent with the 2015 EIR.

Electrical Control Building Improvements

Although the original Project did not propose alterations to the Electrical Control Building and internal equipment components, it is located within the boundaries of the Weymouth Plant and the proposed modifications to the original Project associated with this feature are generally consistent with the Project elements analyzed in the 2015 EIR. The proposed modifications include the installation of two MCCs; a wall-mounted air conditioning unit; railings; flooring; access hatch; removable guardrails on the loading dock and replacement of an RTU and electrical panels (interior alterations) as well as installation of electrical conduits; replacement of three exterior doors and windows and the replacement of the west elevation roll-up door with double-swing doors (exterior alterations).

As previously noted, the Electrical Control Building is identified in the CRTP as a most significant feature of the historic district. The CRTP discusses a range of potential project-related impacts and provides recommendations and treatment measures for projects involving most significant buildings and features. The CRTP provides the following examples of project activities that could pose a substantial adverse change to a feature ranked most significant, such as the Electrical Control Building:

- Demolition of key architectural features
- Replacement of the hipped roof with Spanish tile with dissimilar forms or materials
- Minor alterations to the Mission-style parapet
- Reconfiguration of certain spaces such as entry rotunda, arcaded walkways
- Removal of terrazzo flooring, period tile, or ox-eye windows
- Removal and replacement of window frames and openings that are dissimilar in style (patterns and configuration of lights), scale, or massing (Chasteen and Morrison 2016)

Many of the elements included in the Electrical Control Building Improvements project would occur on the interior of the Electrical Control Building. The interior of the Electrical Control Building is not considered historically significant and does not contain character-defining features. Therefore, improvements that would occur on the building's interior (i.e., installation of two MCCs, a wall-mounted air conditioning unit, railings, flooring and removable guardrails on the loading dock and replacement of an RTU and electrical panels) would comply with *The Secretary of the Interior's Standards for the Treatment of Historic Properties* ("Secretary's Standards") because they would not negatively alter any character-defining features. The installation of electrical conduits on the exterior of the Electrical Control Building would be considered a "minor alteration" as defined in the CRTP because it entails relatively diminutive features to the building and requires minimal intervention to attach. Because this alteration would not require the removal of original material or significantly alter the building's current appearance, it complies with the Secretary's Standards and is consistent with the guidance of the CRTP.

The project also includes the replacement of all the doors and windows on the Electrical Control Building. The windows are considered significant character-defining features while the period doors are considered less significant. The metal roll-up door, which is proposed to be replaced, is not original to the building and is not considered character-defining. Although the designs of the window and door replacements have not yet been finalized, Metropolitan has committed to replacing the doors and windows in kind (i.e., they will be constructed of a consistent material and feature a consistent number and configuration of windowpanes as the building's current windows and doors, which appear original) and installing the new windows and doors in a manner that would not require the widening of the existing openings.

The in-kind replacement of period windows and doors complies with the Secretary's Standards and would not pose a substantial adverse change to the character-defining features of the Electrical Control Building,

which is ranked as Significant or Most Significant. As such, the proposed replacement of the windows and doors of the Electrical Control Building would not require additional mitigation in accordance with the 2015 EIR, which states impacts are less than significant when project elements comply with the Secretary's Standards. Therefore, no further mitigation is required.

Archaeological Resources

A cultural resources field survey and archival research completed for the 2015 EIR did not identify or indicate the presence of archaeological resources within the Weymouth Plant boundaries. As detailed in that analysis, the Weymouth Plant has been highly disturbed and subject to ground disturbance to depths of approximately 18 feet below ground surface in the developed areas of the plant. This ground disturbance included the construction of foundations and installation of subsurface piping and conduits, which would have destroyed any potential archaeological resources in the immediate area.

The proposed modifications would be constructed within the boundaries of the Weymouth Plant and within those areas that have been previously disturbed. Furthermore, the proposed modifications would be limited to the alteration of buildings and structures and would not involve ground disturbance. Therefore, the proposed modifications would not result in new or substantially more severe significant impacts to archaeological resources. This impact would be less than significant, consistent with the 2015 EIR.

Human Remains

The 2015 EIR determined no human remains are known to occur within impact areas of the original project, and the potential for human remains is low due to extensive ground disturbance at the Weymouth Plant. The proposed modifications do not propose ground disturbance; however, if human remains are unearthed, Metropolitan would be required to comply with all applicable laws and regulations, including State of California Code Section 7050.5 for the proper notification of the County Coroner and the Native American Heritage Commission. Therefore, the proposed modifications would not result in new or substantially more severe significant impacts to human remains. This impact would be less than significant, consistent with the 2015 EIR.

3.4.4 Conclusion

The proposed modifications to the Project would not result in new significant impacts to cultural resources or substantially increase the severity of impacts already identified in the 2015 EIR. Impacts would be similar to those identified in the 2015 EIR. Therefore, impacts related to cultural and historical resources would be considered less than significant with mitigation incorporated, and no further mitigation is required.

3.5 Energy

The Project's energy impacts were evaluated in Section 5.3, *Significant Irreversible Environmental Changes*, of the 2015 EIR. Although a separate chapter evaluating energy impacts was not included in the 2015 EIR, a separate discussion of energy is included in this Addendum per the most recent version of the *State CEQA Guidelines* in which energy is included in the Appendix G checklist as a separate resource category.

3.5.1 Setting

As a state, California is one of the lowest per capita energy users in the United States, ranked 48th in the nation, due to its energy efficiency programs and mild climate (United States Energy Information Administration 2021). Electricity and natural gas are primarily consumed by the built environment for lighting, appliances, heating and cooling systems, fireplaces, and other uses such as industrial processes in addition to being consumed by alternative fuel vehicles. Approximately 32 percent of California's electricity supply comes from renewable energy sources, such as wind, solar photovoltaic, geothermal, and biomass (California Energy Commission [CEC] 2021). Petroleum fuels are primarily consumed by on-road and off-road equipment in addition to some industrial processes. Gasoline, which is used by light-duty cars, pickup trucks, and sport utility vehicles, is the most used transportation fuel in California with 15.4 billion gallons sold in 2019 (CEC 2020). Diesel, which is used primarily by heavy duty-trucks, delivery vehicles, buses, trains, ships, boats and barges, farm equipment, and heavy-duty construction and military vehicles, is the second most used fuel in California with 1.8 billion gallons sold in 2019 (CEC 2020).

Energy consumption is directly related to environmental quality in that the consumption of nonrenewable energy resources releases criteria air pollutant and GHG emissions into the atmosphere. The environmental impacts of air pollutant and GHG emissions associated with the energy consumption of the proposed modifications are discussed in detail in Section 3.2 (Air Quality) and Section 3.6 (Greenhouse Gas Emissions), respectively.

3.5.2 Significance Threshold Criteria

The following CEQA significance threshold criteria were used to evaluate impacts to energy associated with the proposed modifications to the Project. Impacts would be potentially significant if the proposed modifications would introduce new significant impacts or substantially increase the severity of previously identified significant impacts associated with:

- a) Potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation
- b) Conflicts with or obstruction of a state or local plan for renewable energy or energy efficiency

3.5.3 Potential Impacts

Consumption of Energy Resources

The 2015 EIR determined the original Project would result in the irretrievable and irreversible commitment of energy resources in the form of diesel fuel, gasoline and electricity during construction and operation. However, the 2015 EIR concluded these types of resources are anticipated to be in adequate supply into the foreseeable future; therefore, impacts due to these irretrievable and irreversible commitments of resources were not considered significant.

Although construction of the proposed modifications would use a similar quantity of construction equipment and a similar-sized workforce on a daily basis as that evaluated in the 2015 EIR, the overall construction duration for the Basin Nos. 5-8 project would be extended by approximately 21 months beyond that contemplated by the 2015 EIR to accommodate the proposed modifications. The extended construction schedule would therefore result in greater total energy consumption associated with construction activities. Energy use associated with the proposed modifications to the Project would be primarily in the form of fuel consumption to operate heavy equipment, worker vehicles, concrete trucks,

and haul trucks during construction activities for the proposed modifications. Energy consumption associated with the extended construction schedule associated with the proposed modifications was estimated using the project-specific details included in the GHG emissions modeling (see Section 3.6 [Greenhouse Gas Emissions] for further discussion) and fuel consumption factors published by the United States Environmental Protection Agency and United States Department of Transportation. Table 3.5-1 summarizes the anticipated energy consumption associated with construction of the proposed modifications for informational and disclosure purposes. As shown below, construction of the proposed modifications would consume approximately 11,037 gallons of gasoline fuel and approximately 344,001 gallons of diesel fuel.

Table 3.5-1. Estimated Fuel Consumption (gallons) for the Proposed Modifications

	Gasoline	Diesel
Heavy Off-road Equipment	--	341,425
Concrete Delivery and Haul Trips	--	2,576
Construction Worker Trips	11,037	--
Total Fuel Consumption	11,037	344,001

Note: Anticipated energy consumption during construction of the proposed modifications is provided for informational and disclosure purposes.
Source: Energy calculations in Appendix B

Energy use during construction of the proposed modifications would be temporary in nature, and heavy equipment used would be typical of Metropolitan's ongoing construction and maintenance projects throughout its service area. In addition, contractors would be required to comply with the provisions of 13 California Code of Regulations Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes, which would minimize unnecessary fuel consumption. Heavy equipment would be subject to the United States Environmental Protection Agency Construction Equipment Fuel Efficiency Standard (40 Code of Federal Regulations Parts 1039, 1065, and 1068), which would minimize inefficient fuel consumption. Furthermore, in the interest of cost efficiency, contractors and staff would not utilize fuel in a manner that is wasteful or unnecessary. In addition, vehicles used by workers during construction activities would be subject to increasingly stringent federal and state fuel efficiency standards, which would minimize the potential for inefficient fuel usage.

Upon completion, the proposed modifications would not require additional operations and maintenance activities, such as staff vehicle trips, beyond those currently occurring at the Weymouth Plant. Furthermore, the proposed modifications would enable Metropolitan to continue operating its water treatment facilities in an energy-efficient manner. Nevertheless, similar to the original Project, the proposed modifications would result in the irretrievable and irreversible commitment of energy resources in the form of diesel fuel, gasoline and electricity during construction and operation. However, as discussed in the 2015 EIR, because these types of resources are anticipated to be in adequate supply into the foreseeable future, impacts due to these irretrievable and irreversible commitments of resources are not considered significant. Therefore, the proposed modifications would not result in a new or substantially more severe significant impact related to the wasteful, inefficient, or unnecessary consumption of energy resources. This impact would be less than significant, consistent with the 2015 EIR.

Renewable Energy and Energy Efficiency Plans

Policy 5.2 of the City of La Verne's General Plan (1998) is to "reduce energy consumption," which is followed by various implementation measures that require energy-saving designs and features in new and refurbished buildings and encourage public employees to follow energy conservation procedures. The proposed modifications to the Project would enable Metropolitan to continue operating its water treatment facilities in an energy-efficient manner using recent technology. Therefore, the proposed modifications would be consistent with Policy 5.2 of the City of La Verne's General Plan. As a result, no impacts related to consistency with renewable energy and energy efficiency plans would occur.

3.5.4 Conclusion

The proposed modifications to the Project would not result in significant impacts related to energy. Therefore, the proposed modifications would not result in new significant impacts or substantially increase the severity of impacts already identified in the 2015 EIR, and no further mitigation is required.

3.6 Greenhouse Gas Emissions

The 2015 EIR prepared for the original Project concluded potential environmental impacts related to GHG emission impacts would be less than significant. This section provides an analysis of the potential GHG emission impacts associated with the proposed modifications to the Project.

3.6.1 Setting

Overview of Climate Change and Greenhouse Gases

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. Climate change is the result of numerous, cumulative sources of GHG emissions contributing to the "greenhouse effect," a natural occurrence that takes place in Earth's atmosphere and helps regulate the temperature of the planet. The majority of radiation from the sun hits Earth's surface and warms it. The surface, in turn, radiates heat back towards the atmosphere in the form of infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping into space and re-radiate it in all directions.

GHG emissions occur both naturally and as a result of human activities, such as fossil fuel burning, decomposition of landfill wastes, raising livestock, deforestation, and some agricultural practices. GHGs produced by human activities include carbon dioxide (CO₂), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Different types of GHGs have varying global warming potentials. The global warming potential of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO₂) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as "carbon dioxide equivalent" (CO₂e), which is the amount of GHG emitted multiplied by its global warming potential. Carbon dioxide has a 100-year global warming potential of one. By contrast, methane has a global warming potential of 28, meaning its global warming effect is 28 times greater than CO₂ on a molecule per molecule basis (Intergovernmental Panel on Climate Change 2014).³

³ The Intergovernmental Panel on Climate Change's (2014) *Fifth Assessment Report* determined that methane has a global warming potential of 28. However, the 2017 Climate Change Scoping Plan published by the California Air Resources Board uses a global warming potential of 25 for

3.6.2 Significance Threshold Criteria

The following CEQA significance threshold criteria were used to evaluate impacts to GHG emissions associated with the proposed modifications to the Project. Impacts would be potentially significant if the proposed modifications would introduce new significant impacts or substantially increase the severity of previously identified significant impacts associated with:

- a) The generation of GHG emissions, either directly or indirectly, that may have a significant impact on the environment
- b) A conflict with any applicable plan, policy, or regulation adopted to reduce the emissions of greenhouse gases

Consistent with the approach of the 2015 EIR, the SCAQMD's significance threshold of 10,000 metric tons (MT) of CO₂e per year is used in this analysis to evaluate the significance of the GHG emissions impacts of the proposed modifications. In addition, this analysis utilizes the SCAQMD guidance for the determination of the significance of construction-related GHG emissions that recommends total emissions from construction be amortized over a 30-year period and added to operational emissions, then compared to the threshold (SCAQMD 2008b).

3.6.3 Potential Impacts

Generation of GHG

The 2015 EIR determined the original Project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment. Construction of the proposed modifications would generate temporary GHG emissions, primarily as a result of the operation of construction equipment on site as well as from vehicles transporting construction workers and material deliveries. Although construction of the proposed modifications would use the similar construction equipment and a similar-sized workforce on a daily basis as that evaluated in the 2015 EIR, the overall construction duration for the Basin Nos. 5-8 project would be extended by approximately 21 months beyond that contemplated by the 2015 EIR to accommodate the proposed modifications. The extended construction schedule would therefore result in greater total GHG emissions associated with construction activities.

GHG emissions associated with construction of the proposed modifications were estimated using CalEEMod version 2020.4.0 in accordance with the project details outlined in Section 2.3 (Project Location and Project Description) and the GHG emissions modeling of the 2015 EIR. Calculations of CO₂, methane, and nitrous oxide emissions are provided in this analysis to identify the magnitude of potential project effects. Specifically, it was assumed construction of the proposed modifications would require six additional months and utilize off-road equipment listed in Table 3.6-1. In addition, consistent with the emissions modeling of the 2015 EIR and the requirements of the proposed modifications, it was assumed 28 roundtrip worker trips (20 construction worker trips and eight pick-up truck trips) and 53 roundtrip vendor trips (concrete delivery) would occur each day and nine roundtrip haul trips (six trips for infrastructure delivery and three trips for dump trucks and semi-truck flatbed trailers) would occur over the course of the six-month construction period. Trip lengths for each trip type were based on CalEEMod default trip lengths for the SCAQMD region, which are 14.7 miles for one-way worker trips, 6.9 miles for one-way vendor trips, and 20 miles for one-way haul trips.

methane, consistent with the Intergovernmental Panel on Climate Change's (2007) *Fourth Assessment Report*. Therefore, this analysis utilizes a global warming potential of 25.

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Table 3.6-1. Off-road Construction Equipment List for the Proposed Modifications

Equipment	Quantity
Man Lifts	2
Abrasive Blasting Equipment	2
Concrete Pumps with Boom	4
Concrete Saws	2
Welders	3
Air Compressors	6
Rubber Tired Loader	1
Excavator	1
Backhoe	1
Generators	2
Portable Blowers (50,000 CFM)	2
Forklifts	3
Cranes (300-ton)	3
Vacuum Equipment	1

TIG = tungsten inert gas; MIG = metal inert gas; CFM = cubic feet per minute

As shown in Table 3.6-2, the extended construction schedule associated with the proposed modifications would increase construction-related emissions by an estimated total of 109 MT of CO₂e per year when amortized over a 30-year period per SCAQMD guidance. GHG emissions associated with construction of the proposed modifications would increase the Project's GHG emissions to 2,378 MT of CO₂e per year, which would not exceed the threshold of 10,000 MT of CO₂e per year. Therefore, the proposed modifications would not result in new or substantially more severe significant impacts related to GHG emissions generated by construction activities. This impact would remain less than significant, consistent with the 2015 EIR.

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Table 3.6-2. Project GHG Emissions with Proposed Modifications

Emission Source	Estimated Emissions (MT of CO ₂ e per Year)
Existing Conditions Plus Oxidation Retrofit Program (Operation Only)	
Existing Weymouth Plant Facilities ¹	2,919
Oxidation Retrofit Program ¹	1,168
Total	4,087
Future with Project and Proposed Modifications (2024)	
Weymouth Plant Facilities (Operation Only) ¹	4,087
Annual Construction for Original Project (Amortized over 30 Years) ¹	394
Annual Construction for Proposed Modifications (Amortized over 30 Years) ²	109
Solar Generation Project (Operation Only) ¹	(2,212)
Total (Construction and Operational Emissions)	2,378
Significance Threshold	10,000
Threshold Exceeded?	No

Notes: MT (metric tons), CO₂e (carbon dioxide equivalent).

¹ Source: Table 3.5-2 of the 2015 EIR

² Source: CalEEMod output files in Appendix C

Upon completion, the proposed modifications would not require additional operations and maintenance activities beyond those currently occurring at the Weymouth Plant. Therefore, no new operational emissions of GHG would be generated, and the proposed modifications would not result in new or substantially more severe significant operational impacts related to GHG emissions. This impact would be less than significant, consistent with the 2015 EIR.

Conflict with Applicable Plans and Policies

The 2015 EIR determined the original Project would be consistent with applicable plans, policies, and regulations adopted to reduce GHG emissions. The City of La Verne's General Plan (1998) does not contain policies aimed at reducing GHG emissions. Furthermore, the proposed modifications would enable Metropolitan to continue operating its water treatment facilities in an energy-efficient manner and therefore would not conflict with the GHG emissions reduction measures listed in the CARB (2017) Climate Change Scoping Plan. Therefore, the proposed modifications would not conflict with applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of GHGs, and impacts would be less than significant. Additionally, the proposed modifications would not result in new or substantially more severe significant impacts related to the consistency with applicable plans, policies, and regulations adopted to reduce GHG emissions. This impact would be less than significant, consistent with the 2015 EIR.

3.6.4 Conclusion

The proposed modifications to the Project would not result in any new or more severe significant impacts related to GHG emissions or substantially increase the severity of impacts already identified in the 2015

EIR. Impacts would be similar to those determined in the 2015 EIR. Therefore, impacts related to GHG emissions would be less than significant, and no further mitigation is required.

3.7 Hazards and Hazardous Materials

The 2015 EIR prepared for the original Project concluded potential environmental impacts to hazards and hazardous materials would be less than significant. This section provides an analysis of the potential impacts to hazards and hazardous materials associated with the proposed modifications to the Project.

3.7.1 Setting

As discussed in the 2015 EIR, the Project site is not located on an active hazardous materials site; however, it does contain a closed Leaking Underground Storage Tank (LUST) cleanup site that was cleaned up in 1991 and no longer poses a risk to the public or the environment. In addition, there are no active hazardous materials sites within 0.25 mile of the Project site (California State Water Resources Control Board 2021; California Department of Toxic Substances Control 2021). The Weymouth Plant currently uses one hazardous material – chlorine – for day-to-day treatment operations. Chlorine is stored in a tightly controlled and continuously monitored building equipped with video cameras, alarmed doors, chlorine leak detectors, and emergency shut-off systems. Any accidental chlorine release is designed to be contained within the chlorine building and neutralized by a caustic scrubber system. Treatment chemicals are delivered to the Weymouth Plant on a regular basis via an existing rail line or by truck. The Los Angeles County Fire Department hazardous materials response team is responsible for responding to hazardous materials accidents on the Weymouth Plant.

3.7.2 Significance Threshold Criteria

The following CEQA significance threshold criteria were used to evaluate impacts to hazards and hazardous materials associated with the proposed modifications to the Project. Impacts would be potentially significant if the proposed modifications would introduce new impacts or substantially increase the severity of previously identified significant impacts associated with:

- a) The creation of a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials
- b) The creation of 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) The emission of hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school
- d) The location of the project on a site that is included on a list of hazardous materials sites compiled under Government Code Section 65963.5 and, as a result, the creation of a significant hazard to the public or the environment
- e) For projects 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, the creation of a safety hazard or excessive noise for people residing or working in the Project area
- f) The impairment of the implementation of or the physical interference with an adopted emergency response plan or emergency evacuation plan

- g) The exposure of people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires

The 2015 EIR focused on evaluating impacts related to the transportation, use, and disposal of hazardous materials; the creation of a significant hazard through reasonably foreseeable upset and accident conditions ; and the emission of hazardous emissions and handling of acutely hazardous materials within 0.25 mile of a school (questions [a, b, c] of the *State CEQA Guidelines* Appendix G checklist) because the NOP/IS determined implementation of the original Project would not result in significant impacts related to airport hazards, emergency response and evacuation plans, and wildland fires (question [d, e, f, g]). Consequently, these questions will not be discussed in this Addendum.

3.7.3 Potential Impacts

Transportation of Hazardous Materials

The 2015 EIR determined construction of the original Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. As discussed in the 2015 EIR, Project construction activities would temporarily increase the use and transport of commonly used hazardous materials (i.e., gasoline, diesel fuel, hydraulic fluids, paint, and other similarly related materials). These materials would be brought into the Project site, used, stored, and disposed during the construction period. Hazardous materials would be transported in accordance with California Highway Patrol requirements and regulations. Disposal of all hazardous materials would be in compliance with federal and state requirements and regulations. Construction of the proposed modifications to the Project would require use of similar hazardous materials that would be transported and disposed of in accordance with applicable federal and state requirements and regulations. Therefore, construction of the proposed modifications would not result in new or substantially more severe significant impacts related to the transport, use, and disposal of hazardous materials. This impact would be less than significant, consistent with the 2015 EIR.

The 2015 EIR determined operation of the original Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Upon completion, the proposed modifications would not require additional operations and maintenance activities, such as additional chemical truck deliveries, beyond those currently occurring at the Weymouth Plant. Therefore, operation of the proposed modifications would not result in new or substantially more severe significant impacts related to the transport, use, and disposal of hazardous materials. No impact would occur, consistent with the 2015 EIR.

Accidental Upset

The 2015 EIR determined construction of the original Project would not 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. As discussed in the 2015 EIR, hazardous materials could accidentally be spilled or released into the environment, exposing construction workers, the public, and/or the environment to potentially hazardous conditions during construction activities. However, compliance with safety regulations, use of spill cleanup kits, and implementation of required best management practices (BMPs) such as training of employees and contractors in proper hazardous materials storage and handling procedures, emergency response and cleanup procedures, and installation of secondary containment units would minimize the potential for accidental spills and releases to expose construction workers, the public, and/or the environment to potentially hazardous conditions. Construction of the proposed modifications to the Project would be subject to the same requirements and

would therefore have similarly low potential for accidental spills and releases of hazardous materials to expose construction workers, the public, and/or the environment to potentially hazardous conditions. Therefore, construction of the proposed modifications would not result in new or substantially more severe significant impacts related to the creation of 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. This impact would be less than significant, consistent with the 2015 EIR.

The 2015 EIR determined operation of the original Project would not 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. Upon completion, the proposed modifications would not require additional operations and maintenance activities, such as additional chemical truck deliveries, beyond those currently occurring at the Weymouth Plant. Therefore, operation of the proposed modifications would not result in new or substantially more severe significant impacts related to the creation of 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. No impact would occur, consistent with the 2015 EIR.

Hazardous Materials near Schools

The 2015 EIR determined construction of the original Project would not result in the emission of hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. As discussed in the 2015 EIR, the Project site is located within 0.25 mile of eight schools, which are summarized below in Table 3.7-1.

Table 3.7-1. School Facilities Located within 0.25 Mile of the Project Site

School Facility	Address
Grace Miller Elementary School	1629 Holly Oak Street
Calvary Baptist School	2990 Damien Avenue
La Verne Parent Participation Preschool	909 Juanita Avenue
La Verne KinderCare	3602 Wheeler Avenue
Damien High School	2280 Damien Avenue
Ramona Middle School	3490 Ramona Avenue
Ramona Avenue Christian Church	909 East Juanita Avenue
Joan Macy School	1350 3 rd Street

Source: Table 3.6-1 in the 2015 EIR

Project construction activities would involve the transport of hazardous materials and waste via trucks that would travel from Interstate 210 to the Weymouth Plant via Wheeler Avenue, which is a designated state and federal truck route. All construction workers would comply with local, state, and federal safety regulations regarding the handling, use, and disposal of all hazardous materials and implement BMPs that would prevent a release to the environment from hazardous materials use and transport. The proposed modifications would also be subject to compliance with these regulations and BMPs. Therefore, construction of the proposed modifications would not result in new or substantially more severe significant impacts related to the release of hazardous materials within 0.25 mile of a school. This impact would be less than significant, consistent with the 2015 EIR.

The 2015 EIR determined operation of the original Project would not result in the emission of hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-

quarter mile of an existing or proposed school. Upon completion, the proposed modifications would not require additional operations and maintenance activities, such as additional chemical truck deliveries, beyond those currently occurring at the Weymouth Plant. Therefore, operation of the proposed modifications would not result in new or substantially more severe significant impacts related to the release of hazardous materials within 0.25 mile of a school. No impact would occur, consistent with the 2015 EIR.

3.7.4 Conclusion

The proposed modifications to the Project would not result in new significant impacts to hazards and hazardous materials or substantially increase the severity of significant impacts already identified in the 2015 EIR. Impacts would be similar to those identified in the 2015 EIR. Impacts would remain less than significant, and no further mitigation is required.

3.8 Hydrology and Water Quality

The 2015 EIR prepared for the original Project concluded potential environmental impacts to hydrology and water quality would be less than significant. This section provides an analysis of the potential impacts to hydrology and water quality associated with the proposed modifications to the Project.

3.8.1 Setting

The Project site is located in the San Gabriel River Watershed, which extends from Puente Hills to San Pedro Bay, and is under the jurisdiction of the Los Angeles Regional Water Quality Control Board. Drainages in the Project area include Marshall Creek directly east of the Project site, Puddingstone Channel to the west, Live Oak Channel further east, and Live Oak Wash to the east and south (see Figure 3.7-1 in the 2015 EIR for specific locations of these drainages in relation to the Project site). The Puddingstone Reservoir, a flood control and recreational facility, is located approximately 1.5 miles southwest and downstream of the Project site within the Frank G. Bonelli Regional County Park. There are two water bodies in the Project area listed on the Clean Water Act Section 303(d) list for impairments – the Puddingstone Reservoir (polluted/stressed by chloride, dichlorodiphenyltrichloroethane, mercury, organic enrichment/low dissolved oxygen, polychlorinated biphenyls, and dieldrin) and Walnut Creek Wash (polluted/stressed by benthic-macroinvertebrate bioassessments, indicator bacteria, and pH).

Stormwater runoff flows generally from north to south across the Project site, which is divided into five drainage areas (see Figure 3.7-2 in the 2015 EIR for a map of the drainage areas) that direct runoff and stormwater into Marshall Creek on the eastern side and into storm drains on the western side. The Project site is not located within a flood hazard zone (see Figure 3.7-3 of the 2015 EIR for a map of the Project site in relation to flood hazard zones).

3.8.2 Significance Threshold Criteria

The following CEQA significance threshold criteria were used to evaluate impacts to hydrology and water quality associated with the proposed modifications to the Project. Impacts would be potentially significant if the proposed modifications would introduce new impacts or substantially increase the severity of previously identified significant impacts associated with:

- a) The violation of any water quality standards or waste discharge requirements or otherwise substantial degradation of surface or groundwater quality

- b) The substantial decrease of groundwater supplies or substantial interference with groundwater recharge such that the project may impede sustainable groundwater management of the basin
- c) The substantial alteration of the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
 - i. Result in substantial erosion or siltation on- or off-site
 - ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site
 - iii. 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 or
 - iv. Impede or redirect flood flows
- d) In flood hazard, tsunami, or seiche zones, the risk of releasing pollutants due to project inundation
- e) Conflicting with or obstructing implementation of a water quality control plan or sustainable groundwater management plan

The 2015 EIR focused on evaluating impacts related to the degradation of water quality and the alteration of existing drainage patterns (questions [a, c] of the *State CEQA Guidelines* Appendix G checklist) because the NOP/IS determined that implementation of the original Project would not result in significant impacts related to groundwater supplies, flood hazards, tsunamis, and seiches (question [b, d, e]). Consequently, these questions will not be discussed in this Addendum.

3.8.3 Potential Impacts

Water Quality

The 2015 EIR determined construction and operation of the original Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality. As discussed in the 2015 EIR, construction of the original Project would involve demolition and earthmoving activities such as excavation, grading, and soil stockpiling that could result in pollutant discharge and soil erosion and the potential subsequent discharge of pollutants and sediment to down-gradient surface waters or drainages (e.g., Marshall Creek and adjacent storm drains). In addition, Project construction activities would involve the use and handling of chemicals such as, but not limited to, concrete, cement, oil, fuels, and lubricants. In the event of accidental release of chemicals, such as spills during fueling of equipment or vehicles, the chemicals could come into contact with stormwater runoff and discharge into the nearby water bodies, thus affecting surface water quality. However, the 2015 EIR determined impacts would be less than significant due to compliance with the stormwater control requirements of the Statewide National Pollutant Discharge Elimination System Construction General Permit for individual projects with disturbance areas of greater than one acre.

The Basin Nos. 5-8 Rehabilitation and the Filter Building 2 Valves Replacement projects and the proposed modifications would not be subject to the requirements of the Construction General Permit because they would not result in ground disturbance of more than one acre. The proposed modifications to the Project would primarily involve upgrading, replacing, and installing equipment and infrastructure and would not include major ground disturbance that would result in substantial soil erosion. Furthermore, as discussed in Section 2.3.3, *Construction*, BMPs in Metropolitan's standard specifications would be implemented to control erosion and limit any run-off discharge associated with the proposed

modifications. Upon completion, the proposed modifications would not require additional operations and maintenance activities beyond those currently occurring at the Weymouth Plant. Therefore, construction and operation of the proposed modifications would not result in new or substantially more severe significant impacts to water quality. This impact would be less than significant, consistent with the 2015 EIR.

Drainage, Runoff, Flooding, and Storm Drain Capacity

The 2015 EIR determined construction and operation of the original Project would not result in the substantial alteration of the existing drainage pattern of the site or area that would result in substantial erosion or siltation, substantially increase the rate or amount of surface runoff that would result in flooding, create or contribute runoff water that would exceed the capacity of stormwater drainage systems or provide substantial additional sources of polluted runoff, or impede or redirect flood flows. The proposed modifications would be constructed within paved areas of the Weymouth Plant and would not alter existing on-site drainage patterns. In addition, as discussed in the 2015 EIR, Metropolitan's standard practice for smaller projects (less than one acre of disturbance) that do not require Stormwater Pollution Prevention Plans (SWPPPs) under the Statewide National Pollutant Discharge Elimination System Construction General Permit is to have construction contractors prepare a Water Pollution Control Plan (WPCP). A WPCP is similar to a SWPPP but is prepared when the total disturbed area of the project site is less than one acre. A WPCP is a water quality management plan that follows local jurisdiction guidelines and consists of BMPs, drawings, and preventive measures to prevent and minimize impacts to water quality. The proposed modifications would be subject to the WPCP requirements, which would minimize the impacts of construction activities on water quality, runoff volumes, flooding, and stormwater discharge. Furthermore, the proposed modifications would not introduce new impervious surfaces at the Weymouth Plant that would alter the existing on-site drainage pattern. Therefore, the proposed modifications would not result in the substantial alteration of the existing drainage pattern of the site or area that would result in substantial erosion or siltation, substantially increase the rate or amount of surface runoff that would result in flooding, create or contribute runoff water that would exceed the capacity of stormwater drainage systems or provide substantial additional sources of polluted runoff, or impede or redirect flood flows. Therefore, construction and operation of the proposed modifications would not result in new or substantially more severe significant impacts related to drainage, runoff, flooding, and storm drain capacity. This impact would be less than significant, consistent with the 2015 EIR.

3.8.4 Conclusion

The proposed modifications to the Project would not result in new significant impacts to hydrology and water quality or substantially increase the severity of significant impacts already identified in the 2015 EIR. Impacts would be similar to those identified in the 2015 EIR. Therefore, impacts would remain less than significant, and no further mitigation is required.

3.9 Noise and Vibration

The 2015 EIR prepared for the Project concluded potential environmental impacts to noise and vibration would be significant and unavoidable even with the incorporation of Mitigation Measures Noise-1 through Noise-3, which require the installation of temporary noise barriers/curtains prior to the commencement of any significant noise-generating work (i.e., excavation, grading, demolition); implementation of BMPs for construction noise control; and restrictions on haul routes. This section provides an analysis of the potential impacts of noise and vibration associated with the proposed modifications to the Project.

3.9.1 Setting

Overview of Noise and Vibration

Noise

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (California Department of Transportation [Caltrans] 2013).

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response. Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; dividing the energy in half would result in a 3 dB decrease (Crocker 2007).

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important factors of a project's noise impact. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. One of the most frequently used noise metrics is the equivalent noise level (L_{eq}); it considers both duration and sound power level. The L_{eq} is defined as the single steady A-weighted sound level equivalent to the same amount of sound energy as that contained in the actual fluctuating sound levels over time. Typically, the L_{eq} is summed over a one-hour period (Crocker 2007). Normal conversational levels are in the 60 to 65-dBA L_{eq} range; ambient noise levels greater than 65 dBA L_{eq} can interrupt conversations (Federal Transit Administration [FTA] 2018).

Vibration

Vibration is a unique form of noise because its energy is carried through buildings, structures, and the ground, whereas sound is simply carried through the air. Thus, vibration is generally felt rather than heard. Some vibration effects can be caused by noise (e.g., the rattling of windows from passing trucks). Typically, ground-borne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. Vibration amplitudes are usually expressed in peak particle velocity (PPV) or RMS vibration velocity. The PPV and RMS velocity are normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal (Caltrans 2020). The RMS is generally equivalent to 71 percent of the PPV. Thus, human annoyance usually results in a more restrictive vibration limit than structural damage limits. Table 3.13-1 summarizes the construction vibration damage criteria recommended by the Federal Transit Administration and used in the 2015 EIR to evaluate project impacts related to vibration. These criteria are also used in this Addendum to evaluate the vibration impacts of the proposed modifications.

Table 3.13-1. Construction Vibration Damage Criteria

Building Category	Vibration Level (in/sec PPV)
I. Reinforced-concrete, steel or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3

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III. Non-engineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

Notes: in/sec = inches per second; PPV = peak particle velocity
Source: Federal Transit Administration 2018

Existing Noise Environment

The most prevalent sources of noise in the vicinity of the Project site are vehicular traffic on Interstate 210, State Route 66 (Foothill Boulevard), and Wheeler Avenue. The results of the noise level monitoring completed for the 2015 EIR on Wednesday, April 2, 2014 between 10:00 a.m. and 4:00 p.m. are reproduced in Table 3.13-2 and Figure 4. Noise monitoring location 5, located at a single-family residence in the Fountains Mobile Home Park on Moreno Drive, is the closest monitoring location to the site of the proposed modifications. The noise level at this location was measured as approximately 61 dBA L_{eq} .

Table 3.13-2. Existing Noise Levels

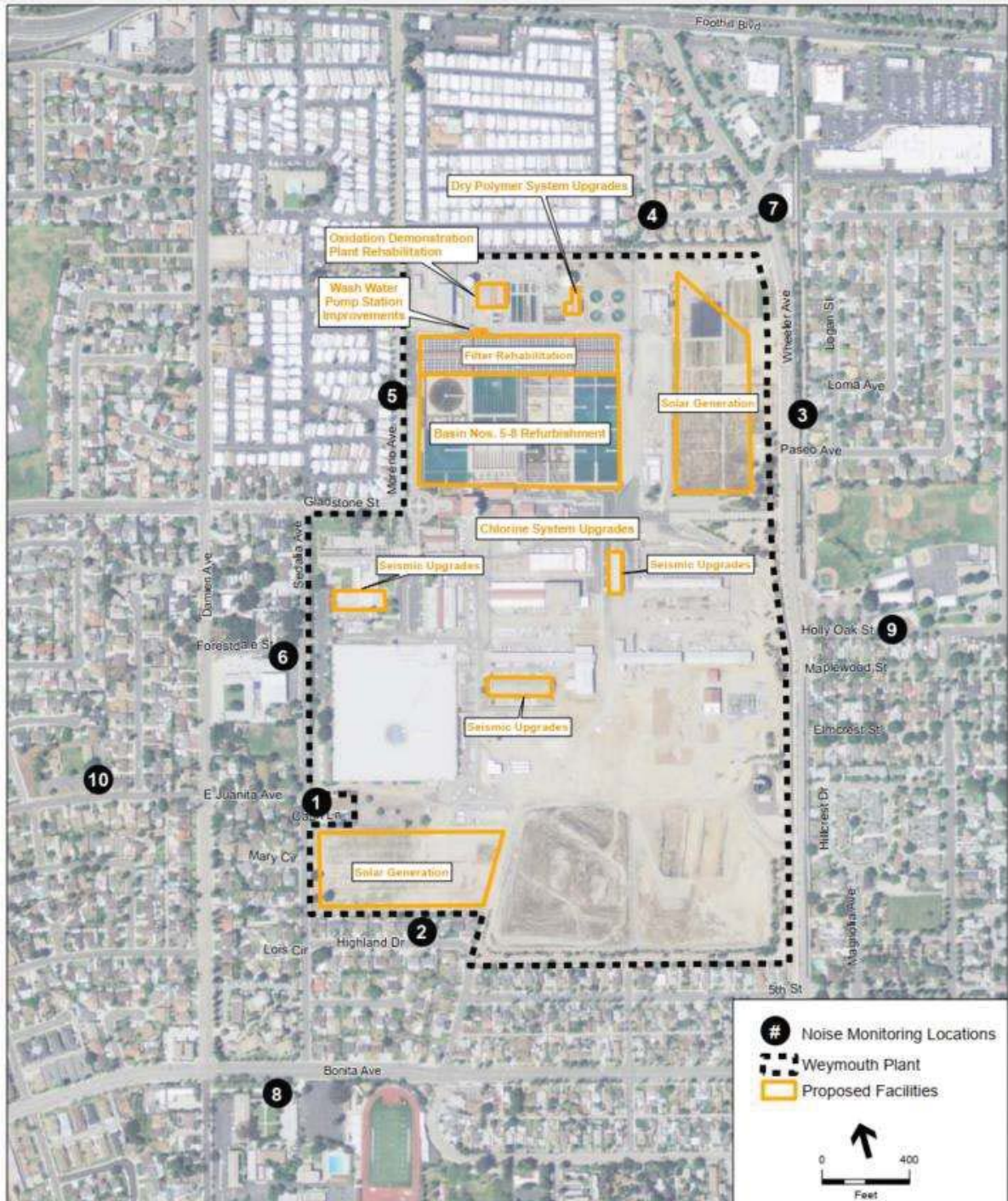
Noise Monitoring Location	Location Description	Sound Level (dBA L_{eq})
1	Single-Family Residence (Sedalia Avenue)	54.4
2	Single-Family Residence (Highland Drive)	46.6
3	Single-Family Residence (Logan Street)	70.5
4	Single-Family Residence (Ancona Drive)/Single-Family Residence – La Verne Mobile Country Club (Vera Cruz Street)	45.8
5	Single-Family Residence – Fountains Mobile Home Park (Moreno Drive)	60.5
6	Calvary Baptist Church and School	53.7
7	La Verne KinderCare	68.5
8	Damien High School	68.2
9	Grace Miller Elementary School	51.3
10	Ramona Avenue Christian Church	56.4

Notes: dBA = A-weighted decibel; L_{eq} = equivalent noise level
Source: Table 3.8-1 of the 2015 EIR

Some land uses are more sensitive to ambient noise levels than other uses due to the amount of noise exposure and the types of activities involved. For example, residences, motels, hotels, schools, libraries, churches, nursing homes, auditoriums, museums, cultural facilities, parks, and outdoor recreation areas are more sensitive to noise than commercial and industrial land uses. Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Noise monitoring locations were established at sensitive receivers closest to the Weymouth Plant, including single-family residences, daycare facilities, public and private schools, and churches, (see Table 3.13-2). The closest sensitive receivers to the locations of the proposed modifications are residences located immediately to the west across Moreno Avenue, approximately 140 feet west of Basin Nos. 1-4 and 770 feet west of the Electrical Control Building.

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Figure 4 Noise Monitoring Locations



Source: Figure 3.8-2 of the 2015 EIR

3.9.2 Significance Threshold Criteria

The following CEQA significance threshold criteria were used to evaluate impacts to noise associated with the proposed modifications to the Project. Impacts would be potentially significant if the proposed modifications would introduce new impacts or substantially increase the severity of previously identified significant impacts associated with:

- a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies
- b) Generation of excessive ground-borne vibration or ground-borne noise levels
- c) For a project located within the vicinity of a private airstrip or 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, exposure of people residing or working in the project area to excessive noise levels

The 2015 EIR focused on evaluating impacts related to the generation of a substantial temporary or permanent increase in ambient noise levels and the generation of excessive ground-borne vibration and noise levels (questions [a, b] of the *State CEQA Guidelines* Appendix G checklist) because the NOP/IS determined that implementation of the original Project would not result in significant impacts related to exposure to airport-related noise (question [c]). Consequently, airport noise-related questions will not be discussed in this Addendum.

The noise and vibration thresholds used in the 2015 EIR to evaluate the original Project impacts are also utilized in this analysis to evaluate the impacts of the proposed modifications. Specifically, the 2015 EIR used the City of La Verne's local noise standards, which incorporate by reference the noise standards contained in the County of Los Angeles' noise control ordinance, to evaluate project impacts related to construction and operational noise. Los Angeles County Code Section 12.08.440 establishes an allowable construction noise level for scheduled and relatively long-term operation (i.e., greater than 10 days) of stationary equipment of 60 dBA L_{eq} at single-family residences from the hours of 7:00 a.m. to 8:00 p.m. This noise level limit was also used to evaluate construction noise impacts to schools and religious facilities. To evaluate construction vibration impacts, the 2015 EIR utilized the Federal Transit Administration's construction vibration damage criteria of 0.2 in/sec PPV for non-engineered timber and masonry buildings. To evaluate operational vibration impacts, the 2015 EIR used the County of Los Angeles' vibration perceptibility standard of 0.01 in/sec PPV at the property boundary of the source.

3.9.3 Potential Impacts

Noise Standards

The 2015 EIR concluded Project construction activities, specifically those related to the Filter Rehabilitation and Solar Generation Projects, would result in significant impacts related to construction noise. Therefore, implementation of Mitigation Measures Noise-1 through Noise-3 was required for those two Project components. However, impacts were determined to be significant and unavoidable because construction noise levels would still exceed the threshold of 60 dBA at single-family residences (following Los Angeles County Code Section 12.08.440 for construction noise) near the Project site even with implementation of these mitigation measures.

Noise-1 Prior to any significant noise-generating work (i.e., excavation, grading, demolishing) to be performed for the Solar Generation Project, Filter Rehabilitation, Dry Polymer System

Upgrades, ODP Rehabilitation and Seismic Upgrades to the Water Quality Lab, temporary noise barriers/curtains extending at least eight feet in height shall be erected around the perimeter of the active construction area or project site boundary such that the off-site receptor has no view of the construction effort. The noise barrier/curtain would be designed to achieve a reduction of 5 dBA or greater. The surface of the noise barrier (or sound wall, acoustic blanket) would present a solid face from top to bottom without any openings or cutouts.

Noise-2 During construction, the following measures shall be implemented, as necessary, to ensure compliance with applicable construction noise ordinances:

- All construction equipment, fixed or mobile, shall be outfitted with properly operating and maintained exhaust and intake mufflers, consistent with manufacturers' standards.
- Impact tools (e.g., jack hammers, etc.) used for construction shall be hydraulically or electrically powered when feasible to avoid noise associated with compressed air exhaust from pneumatically powered tools. When use of pneumatic tools is necessary, an exhaust muffler on the compressed air exhaust shall be used. External jackets on the tools themselves shall be used when feasible. Quieter procedures, such as use of drills rather than impact tools, shall be used whenever feasible.
- Stationary noise sources shall be located as far from adjacent receptors as possible.

Noise-3 Haul routes shall be restricted to arterial roads and shall not be designated through residential areas whenever feasible.

All other construction noise impacts, including off-site construction truck noise, were determined to be less than significant. The 2015 EIR also concluded that operational noise impacts would be less than significant for all aspects of the Project.

Similar to the original Project, construction of the proposed modifications would result in temporary elevated noise levels at nearby sensitive receivers. The closest sensitive receivers to the locations of the proposed modifications are residences located immediately to the west across Moreno Avenue, approximately 140 feet west of Basin Nos. 1-4 and 770 feet west of the Electrical Control Building. As discussed in Section 2.3.3, *Construction*, construction of the proposed modifications to the Project would require use of similar construction equipment and a similar-sized construction workforce as described in the 2015 EIR. The proposed modifications would also require six total additional roundtrip truck trips for removing existing infrastructure from the site and transporting new infrastructure to the site, which would equate to approximately one roundtrip truck trip per day for six days over the 18-month duration of construction activities. This one daily additional construction truck trip on six days of the construction period would not perceptibly increase construction traffic noise levels beyond those evaluated in the 2015 EIR. Therefore, noise levels generated by the operation of on-site construction equipment and off-site construction traffic would be similar to those estimated in the 2015 EIR. The 2015 EIR estimated construction noise levels would be approximately 85 dBA L_{eq} at 50 feet. Assuming a standard distance attenuation of 6 dBA per doubling of distance, construction noise levels at the nearest sensitive receivers (residences located immediately to the west across Moreno Avenue) would be approximately 76 dBA L_{eq} during work at Basin Nos. 1-4 (approximately 140 feet away from residences) and 61 dBA L_{eq} during work at the Electrical Control Building (approximately 770 feet away from residences). Therefore, as with the original Project, construction noise levels associated with the proposed modifications would exceed the threshold of 60 dBA L_{eq} at the nearest sensitive receivers. As a result, construction of the proposed modifications would not result in new or substantially more severe significant construction noise impacts. As such, consistent with the 2015 EIR, construction noise impacts would be significant

and unavoidable, and implementation of Mitigation Measures Noise-1 through Noise-3 would be required.

The 2015 EIR determined operation of the original Project would not generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Upon completion, the proposed modifications would not require additional operations and maintenance activities beyond those currently occurring at the Weymouth Plant. Therefore, no additional operational noise would be generated, and the proposed modifications would not result in new or substantially more severe significant operational noise impacts. This impact would be less than significant, consistent with the 2015 EIR.

Ground-borne Vibration

The 2015 EIR determined construction of the original Project would not generate excessive ground-borne vibration or ground-borne noise levels. Construction of the proposed modifications to the Project would involve the use of heavy equipment, which would generate some ground-borne vibration. Vibration from construction activity is typically below the threshold of perception when the activity is more than 50 feet from receivers (Caltrans 2020). As discussed in the 2015 EIR, construction of the Project would create minor ground vibration; however, vibration levels at the nearest vibration-sensitive receivers (located approximately 40 feet from the nearest original Project construction site and along Highland Drive, which was the southern solar generation facility) would be below the FTA-recommended significance threshold of 0.2 in/sec PPV. Therefore, the 2015 EIR concluded the original Project would not expose people or structures to excessive levels of ground-borne vibration and noise. Impacts from the Project were determined to be less than significant, and no mitigation measures were required.

As discussed in Section 2.3.3, *Construction*, construction of the proposed modifications to the Project would require use of similar construction equipment as anticipated by the 2015 EIR. As mentioned previously, the locations of the proposed modifications are further than 40 feet from the nearest sensitive receivers, which are residences west of Moreno Avenue at approximately 140 feet west of Basin Nos. 1-4 and approximately 770 feet west of the Electrical Control Building. As stated above, the 2015 EIR determined that vibration impacts would be below the FTA-recommended significance threshold of 0.2 in/sec PPV at a distance of 40 feet. Therefore, vibration levels generated by construction of the proposed modifications at the nearest sensitive receivers located 140 feet away from Basin Nos. 1-4 would be low and would be similar to those estimated in the 2015 EIR for the original Project. As such, construction of the proposed modifications would not result in a new or substantially more severe significant construction vibration impacts. As such, consistent with the 2015 EIR, construction vibration impacts would be less than significant.

The 2015 EIR determined operation of the original Project would not generate excessive ground-borne vibration or ground-borne noise levels. Upon completion, the proposed modifications would not require additional operations and maintenance activities beyond those currently occurring at the Weymouth Plant. Therefore, no additional operational vibration would be generated, and the proposed modifications would not result in new or substantially more severe significant operational vibration impacts. This impact would be less than significant, consistent with the 2015 EIR.

3.9.4 Conclusion

The proposed modifications to the Project would not result in new significant noise and vibration impacts or substantially increase the severity of impacts already identified in the 2015 EIR. Impacts would be

similar to those identified in the 2015 EIR. Therefore, construction noise impacts would be significant and unavoidable with implementation of Mitigation Measures Noise-1 through Noise-3 required. All other noise and vibration impacts would be less than significant.

3.10 Transportation and Traffic

The 2015 EIR prepared for the Project concluded potential environmental impacts to transportation would be less than significant. This section provides an analysis of the potential impacts to transportation associated with the proposed modifications to the Project.

3.10.1 Setting

As discussed in the 2015 EIR, regional transportation access to the Project area is provided by the Foothill Freeway (Interstate 210), Orange Freeway (State Route 57), and San Bernardino Freeway (Interstate 10). Local transportation access to the Weymouth Plant is provided by Wheeler Avenue, Foothill Boulevard, Baseline Road, Bonita Avenue, and Arrow Highway. Public transportation in the Project area is provided by Metrolink, Metro Gold Line, and Foothill Transit. According to the 2015 EIR, the intersections along the proposed construction traffic routes on Wheeler Avenue and Foothill Boulevard operated at Level of Service (LOS) D or better under 2014 conditions, which were the existing conditions at the time of certification of the 2015 EIR. Traffic conditions represented by an LOS of D are defined in Table 3.9-1 of the 2015 EIR as “approaching unstable. Drivers may have to wait through more than one red signal cycle. Lane queues develop but dissipate rapidly, without excessive delays.”

3.10.2 Significance Threshold Criteria

The following CEQA significance threshold criteria were used to evaluate impacts to transportation and traffic associated with the proposed modifications to the Project. Impacts would be potentially significant if the proposed modifications would introduce new significant impacts or substantially increase the severity of previously identified significant impacts associated with:

- a) A conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities
- b) A conflict or inconsistency with CEQA Guidelines Section 15064.3(b)
- c) An increase in hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)
- d) Inadequate emergency access

The 2015 EIR focused on evaluating impacts related to conflicts with applicable plans, ordinances, and policies addressing the circulation system, including those related to the congestion management program and public transit, pedestrian, and bicycle facilities, as well as geometric design features and incompatible uses (questions [a, c] of the *State CEQA Guidelines* Appendix G checklist) because the NOP/IS determined that implementation of the original Project would not result in significant impacts to air traffic patterns or emergency access (question [d]). Consequently, questions related to air traffic patterns and emergency access will not be discussed in this Addendum. In addition, question [b] was not previously analyzed in the 2015 EIR because this threshold was added pursuant to updates to the *State CEQA Guidelines* that took effect in December 2018. As such, this Addendum assesses whether the proposed modifications would result in a potentially significant impact with respect to conflict or inconsistency with *State CEQA Guidelines* Section 15064.3(b) pursuant to question [b].

3.10.3 Potential Impacts

Circulation System – Roadway, Public Transit, Bicycle, and Pedestrian Facilities

The 2015 EIR determined construction and operation of the original Project would not result in a conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. As discussed in the 2015 EIR, construction activities for the original Project were anticipated to generate approximately 180 daily one-way passenger-car equivalent (PCE) trips per day (including 96 daily one-way construction worker trips and 28 daily one-way truck trips) with 24 PCE trips during the AM peak hour and 24 PCE trips during the PM peak hour.⁴ With Project-related construction traffic, these intersections were projected to continue operating at a satisfactory LOS of LOS D or better during peak hours (see Tables 3.10-1 and 3.10-2).

Table 3.10-1. Existing Intersection Levels of Service

Intersection	Control	AM Peak Hour		PM Peak Hour	
		V/C	LOS	V/C	LOS
Wheeler Avenue/Foothill Boulevard	Signal	0.710	C	0.840	D
Wheeler Avenue/Holly Oak Street	Signal	0.499	A	0.479	A
Wheeler Avenue/Bonita Avenue	Signal	0.739	C	0.691	B
Foothill Boulevard/I-210 Eastbound Off-ramp	Signal	0.651	B	0.856	D
Foothill Boulevard/I-210 Westbound Ramps	Signal	0.494	A	0.467	A

Notes: v/c = volume-to-capacity ratio; LOS = level of service

Source: Table 3.9-2 of the 2015 EIR

Table 3.10-2. Existing plus Project Construction Traffic Intersection Level of Service Comparison

Intersection	Control	Existing Conditions (2014)				Existing Conditions plus Project				V/C Difference	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM	PM
		V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS		
Wheeler Avenue/Foothill Boulevard	Signal	0.710	C	0.840	D	0.715	C	0.840	D	+0.005	0.000
Wheeler Avenue/Holly Oak Street	Signal	0.499	A	0.479	A	0.501	A	0.480	A	+0.002	+0.001
Wheeler Avenue/Bonita Avenue	Signal	0.739	C	0.691	B	0.740	C	0.691	B	+0.001	0.000
Foothill Boulevard/I-210 Eastbound Off-ramp	Signal	0.651	B	0.856	D	0.655	B	0.860	D	+0.004	+0.004
Foothill Boulevard/I-210	Signal	0.494	A	0.467	A	0.499	A	0.467	A	+0.005	0.000

⁴ A PCE factor of 3.0 was assumed for the truck-trailer trips.

Westbound
Ramps

Notes: v/c = volume-to-capacity ratio; LOS = level of service
Source: Table 3.9-6 of the 2015 EIR

Similar to the original Project, construction-related traffic generated by the proposed modifications would access the site via Wheeler Avenue. As discussed in Section 2.3.3, *Construction*, the proposed modifications would not require additional construction worker trips to the Project site beyond those already anticipated in the 2015 EIR. In addition, simultaneous construction of Basin Nos. 5-8 Rehabilitation and Filter Building 2 Valves Replacement projects, and the proposed modifications would require a total of approximately six roundtrip truck trips spread over the approximately 33-month construction period, which would be well within the 14 daily roundtrip truck trips evaluated in the traffic analysis of the 2015 EIR. Therefore, the proposed modifications would not result in additional impacts to the LOS of nearby intersections or conflict with the Los Angeles County Congestion Management Program. Furthermore, similar to the original Project, the proposed modifications would occur entirely within the Weymouth Plant and would not include any component that would conflict with public transit, bicycle, or pedestrian facilities. Upon completion, the proposed modifications would not require additional operations and maintenance activities beyond those currently occurring at the Weymouth Plant. Therefore, construction and operation of the proposed modifications would not result in new or substantially more severe significant impacts related to consistency with plans, policies, and ordinances addressing the circulation system. This impact would be less than significant, consistent with the 2015 EIR.

State CEQA Guidelines Section 15064.3(b)

State CEQA Guidelines Section 15064.3(b) identifies criteria for evaluating transportation impacts. Specifically, the guidelines state vehicle miles traveled (VMT) exceeding an applicable threshold of significance may indicate a significant impact. According to Section 15064.3(b)(3) of the *State CEQA Guidelines*, a lead agency may include a qualitative analysis of operational and construction traffic. The 2015 EIR did not address VMT because such analysis was not required by the *State CEQA Guidelines* at the time the EIR was certified; VMT requirements were implemented in December 2018. However, as discussed below, the proposed modifications would not substantially affect VMT in the Project area.

A VMT calculation is typically conducted on a daily or annual basis, for long-range planning purposes. As discussed above, traffic on local roadways may temporarily increase during Project construction, including construction traffic associated with the proposed modifications, due to the presence of construction vehicles and equipment. Increases in VMT from construction would be short-term, minimal, and temporary. The proposed modifications, like the original Project, are located at the Weymouth Plant, in an urban community within southern California. As such, it is expected that construction crews and materials would be locally or regionally sourced, reducing construction worker and vendor commute distances. The proposed modifications are located near several major freeway corridors (Interstate 210, Interstate 10, Highway 57), minimizing the travel from major transportation corridors required to reach the Project site. Furthermore, the proposed modifications would not require additional construction workers beyond those anticipated by the 2015 EIR. As a result, construction of the proposed modifications would not involve large construction crews resulting in generation of substantial VMT associated with commuting. Upon completion, the proposed modifications would not require additional operations and maintenance activities beyond those currently occurring at the Weymouth Plant. Because the proposed modifications would not substantially increase construction-related trips or increase operational trips, impacts associated with VMT per *State CEQA Guidelines* Section 15064.3 would be less than significant.

Design Features

The 2015 EIR determined construction and operation of the original Project would not result in an increase in hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). As discussed in the 2015 EIR, the original Project would not require changes to the alignment of existing on- or off-site streets, and construction traffic would utilize the Plant's construction/delivery entrance on Wheeler Avenue designed to accommodate large construction vehicles and delivery trucks. Similarly, the proposed modifications would not include changes to the existing City's traffic circulation system, and construction traffic would utilize the Plant's entrance on Wheeler Avenue. Therefore, the proposed modifications would not result in new or substantially more severe significant impacts related to design features and traffic hazards during construction and operation. This impact would be less than significant, consistent with the 2015 EIR.

3.10.4 Conclusion

The proposed modifications to the Project would not result in new significant impacts to transportation and traffic or substantially increase the severity of impacts already identified in the 2015 EIR. Impacts would be similar to those identified in the 2015 EIR and therefore would be less than significant. No mitigation is required.

3.11 Wildfire

The Project's wildfire impacts were evaluated in Section VIII, *Hazards and Hazardous Materials*, of the NOP/IS of the 2015 EIR. Although a separate chapter evaluating wildfire impacts was not included in the 2015 EIR, a separate discussion of wildfire is included in this Addendum per the most recent version of the *State CEQA Guidelines* in which wildfire is included in the Appendix G checklist as a separate resource category.

3.11.1 Setting

The entire coastal southern California region is prone to large wildfires due to its hot, dry climate and expansive coverage of ignitable vegetation. During the autumn and winter months, strong offshore Santa Ana wind events carry dry, desert air and can fan fast-moving fires that spread rapidly from heavily vegetated wilderness and mountainous areas into developed communities. The Project site is in an urbanized area of La Verne and is approximately 1.1 miles away from the nearest vegetated wildlands (Sycamore Canyon to the north), which limits the spread of large, uncontrolled wildfires. Recent fires in the Project area vicinity include the 2016 San Gabriel Complex Fire (5,399 acres and three fatalities), 2017 Rincon Fire (10 acres), 2018 Fork Fire (166 acres), 2020 San Dimas Fire (131 acres), 2020 Dam Fire (220 acres), 2020 Ranch 2 Fire (4,237 acres), and 2020 Brook Fire (185 acres) (California Department of Forestry and Fire Protection [CAL FIRE] 2017, 2018, 2019, and 2021a; Los Angeles Almanac 2021). These fires all occurred within the Angeles National Forest, which is located approximately 1.8 miles north of the Project site at its nearest point.

The Project site is not located in a designated Very High Fire Hazard Severity Zone (VHFHSZ) or a State Responsibility Area (SRA). The nearest VHFHSZ is an SRA in the city of La Verne, approximately 1.0 mile north of the Project site (CAL FIRE 2021b).

3.11.2 Significance Threshold Criteria

The following CEQA significance threshold criteria were used to evaluate wildfire impacts associated with the proposed modifications to the Project. Impacts would be potentially significant if the proposed modifications are located in or near an SRA or lands classified as VHFHSZ, would introduce new impacts or substantially increase the severity of impacts associated with:

- a) Substantial impairment of an adopted emergency response plan or emergency evacuation plan
- b) The slope, prevailing winds, and other factors exacerbating wildfire risks and thereby exposure of Project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire
- c) Project-required installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment
- d) Exposure of people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes

3.11.3 Potential Impacts

As discussed in Section 3.11.1, *Setting*, the Project site is not located in lands classified as an SRA or VHFHSZ. The nearest such zones are approximately 1.0 mile north of the Project site and are separated from the Project site by intervening development including Interstate 210, State Route 66, and residential and commercial land uses. Therefore, no impacts related to wildfire would occur.

3.11.4 Conclusion

Given that proposed modifications to the Project are not located on or near lands designated as an SRA or VHFHSZ and the proposed modifications involve upgrading, replacing, and improving existing equipment and infrastructure, no impacts associated with wildfire would occur as a result of the proposed modifications. The proposed modifications would not result in new significant impacts or substantially increase the severity of impacts already identified in the 2015 EIR, and no further mitigation is required.

4 List of Preparers

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6 Conclusion

Section 15164(b) of the *State CEQA Guidelines* states the following:

"An addendum to an adopted negative declaration may be prepared if only minor technical changes or additions are necessary or none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred."

The proposed modifications to the original Project would not result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects. Furthermore, new information associated with the proposed modifications does not indicate that the Project will have one or more significant effects not discussed in the 2015 EIR; that significant effects previously examined will be substantially more severe than shown in the 2015 EIR; that mitigation measures previously found not to be feasible would in fact be feasible; or that mitigation measures which are considerably different from those analyzed in the 2015 EIR would substantially reduce one or more significant effects on the environment but the Project proponent declines to adopt the mitigation measures or alternative. Accordingly, an Addendum was prepared as opposed to a subsequent environmental impact report or a negative declaration. As the Lead Agency for the proposed Project modifications, Metropolitan is issuing this Addendum in accordance with the *State CEQA Guidelines* (Section 15164).

The Metropolitan Water District of Southern California

DocuSigned by:

Signature

11/16/2021

Date

Jennifer Harriger
Printed Name

Unit Manager, Environmental Planning
Title

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Appendix A

Historical Resources Technical Memorandum

**Rincon Consultants, Inc.**

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September 14, 2021

Rincon Project No: 21-11505/ Task Order: T020 (BM-1)

The Metropolitan Water District of Southern California

Attn: Ms. Brenda Marines

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Los Angeles, California 90054-0153

Via email: BMarines@mwdh2o.com

Subject: Historical Resources Technical Memorandum – Addendum No. 1 to the 2015 Final Environmental Impact Report for the F.E. Weymouth Water Treatment Plant Improvements Program

Dear Ms. Marines:

Rincon Consultants, Inc. (Rincon) was retained by The Metropolitan Water District of Southern California (Metropolitan) to complete Addendum No. 1 to the 2015 Final Program Environmental Impact Report for the F. E. Weymouth Water Treatment Plant Improvements Program ("2015 EIR"). Certified by the Metropolitan Board on April 14, 2015, the 2015 EIR was prepared in compliance with the California Environmental Quality Act (CEQA) and assessed the potential environmental impacts associated with the F. E. Weymouth Water Treatment Plant Improvements Program ("Weymouth Improvements Program" or "original Project"). Subsequent to the certification of the EIR, minor modifications ("proposed modifications") to the original Project were identified. Specifically, Metropolitan is proposing upgrades to Basin Nos. 1-4 and the Electrical Control Building (formerly called the Davey Shack), as described further below. To comply with CEQA (Public Resources Code Section 21000 et seq.) and the *State CEQA Guidelines* (California Code of Regulations Sections 15000 et seq.), an Addendum to the certified 2015 EIR is being prepared to evaluate the potential environmental impacts associated with the proposed modifications to the original Project.

This historical resources technical memorandum presents an analysis of potential impacts to historical resources in support of Addendum No. 1. The purpose of the analysis presented herein is to determine whether the proposed modifications would result in impacts to historical resources beyond those identified in the certified 2015 EIR for the original Project. As addressed in the certified 2015 EIR, the F. E. Weymouth Water Treatment Plant ("Weymouth Plant") encompasses the Weymouth Water Treatment Plant Historic District ("historic district"). The historic district is eligible for listing in the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR) and is therefore considered a historical resource pursuant to Public Resources Code Section 21084.1. The certified 2015 EIR concluded the original Project would result in less-than-significant impacts to historical resources with mitigation incorporated. The proposed modifications would result in alterations to Basin Nos. 1-4 and the Electrical Control Building, which are contributing elements to the historic district. The alteration of these features was not assessed in the certified 2015 EIR. Therefore, additional analysis is necessary to determine whether the proposed modifications would result in a significant impact to historical resources as defined in Section 15064.5(b) of the *State CEQA Guidelines*.



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This memorandum documents the efforts undertaken by Rincon to evaluate the potential for impacts to Basin Nos. 1-4 and the Electrical Control Building, including the following: background research, a site visit, and an analysis of potential impacts to historical resources as a result of the proposed modifications. All work described herein was overseen by Rincon Senior Architectural Historian Steven Treffers, M.H.P., with support provided by Architectural Historian, Rachel Perzel, M.A. Mr. Treffers and Ms. Perzel meet the Secretary of the Interior's Professional Qualification Standards for architectural history and history (36 Code of Federal Regulations Part 61) and have extensive experience in assessing impacts to historical resources.

Project Background

As previously noted, the 2015 EIR for the Weymouth Improvements Program was certified by Metropolitan on April 14, 2015. Since that time, Metropolitan has been implementing the Weymouth Improvements Program at the Weymouth Plant. The certified 2015 EIR concluded some elements of the original Project had the potential to cause a substantial adverse change in the significance of the historic district, which is a qualifying historical resource. Those Project elements specifically included changes to filter basin elements (impacts through engineered design changes) as part of the the Filter Building Rehabilitation project and changes to mechanical equipment in Basin Nos. 5-8 (impacts through engineered design changes and loss of original material and redesign) as part of the Basin Nos. 5-8 Rehabilitation project. To mitigate these impacts to a less-than-significant level, Metropolitan adopted the following two mitigation measures as part of the certified 2015 EIR, which are required for those Project elements with potential to cause significant impacts.

CUL-1 Photo-documentation to Historic American Engineering Record (HAER) Standards

- (a) Prior to construction, Metropolitan will document the history of the resource's technology at HAER Standards Level 2 (compilation of historical plans, as-built drawings, photographs, and contractor specifications; for further detail see <https://www.nps.gov/hdp/standards/haerguidelines.htm>).¹ Prior to the loss of original material (whether visible from the surface or representing character-defining engineered aspects of the Weymouth Plant) will be taken to depict their visual setting and existing condition, using large-format photography (4 x 5 inch or greater). Photo-documentation will be guided by a qualified architectural historian.
- (b) During and after construction, photographs will be taken to depict the demolition, new construction, and completed work of the project components, using 35-mm photography or larger.
- (c) After construction, the collected documentation will be combined into a HAER-like documentation package (using HAER documentation and formatting) and will be maintained at Metropolitan's Headquarters. This documentation effort will be guided by a qualified architectural historian and documentation will be available for research as appropriate, with consideration given to the security of Metropolitan's facilities.

¹ The weblink provided in the certified 2015 EIR is no longer active and has been updated here.



CUL-2 On-site Exhibit or Display

- (a) An on-site interpretative display will be prepared to illustrate the evolution of the design change in filter cells technology over time. The display will depict the original filter cell design, construction, and modifications made as technology changed between 1941 to present.
- (b) An example of each distinct actuator type (those south of Filter Building No. 2 and south of Basins 5 to 8) of the period of significance will be retained for display on the grounds of the Weymouth Plant.

Description of Proposed Modifications

The proposed modifications include the rehabilitation of Basin Nos. 1-4 and improvements to the Electrical Control Building, each of which is described below.

Basin Nos. 1-4 Rehabilitation

Rehabilitation of Basin Nos. 1-4 would include replacement of eight inlet gates and associated actuators, and gate guides, two motor control centers (MCCs), two gate power panels, and local control panels as well as installation of a new remote input/output (I/O) device for extension of the remote terminal unit (RTU) to accommodate new gate signal and control functions.² The replacement inlet gates would be stainless steel. The MCCs and gate power panels would be replaced in the same locations. The replacement upgrades are planned for the first half-plant shutdown.

Electrical Control Building Improvements

The Electrical Control Building Improvements involve the installation of two MCCs and a wall-mounted air conditioning unit with ¾-inch refrigeration line as well as the replacement of an RTU, electrical panels, three exterior doors, and windows. The replacement of exterior doors and windows would look similar to the existing doors and windows. Electrical conduits would be installed along the exterior building walls to connect the upgraded RTUs and MCCs. The improvements would also include replacement of the roll-up door with double-swing doors, other railings, and resilient flooring inside the building and installation of removable guardrails for the loading dock.

Methods

Background Research and Project Review

The historical significance of the Weymouth Plant has been explored at various levels of detail in several studies, in addition to the certified 2015 EIR. As part of the background research effort conducted for this study, Rincon reviewed the following documents to inform the current analysis and ensure consistency with prior work:

- *Historic Resources Technical Report: F.E. Weymouth Filtration Plant*³

² A remote I/O device is an electronic device that sends and receives input and output signals using transmission technology.

³ Leslie Heumann. *Historic Resources Technical Report: F.E. Weymouth Filtration Plant*. Prepared for the Metropolitan Water District of Southern California. December 2004.



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- *Cultural Resource Treatment Plan for the Weymouth Water Treatment Plant Historic District, City of La Verne, Los Angeles County, California*⁴

Rincon also performed a review of the plans associated with the proposed modifications, which were provided by Metropolitan and are included as an attachment to this memorandum for reference. Further detail on the proposed modifications was provided verbally in a meeting held between Rincon and Metropolitan on July 15, 2021. In addition, Rincon reviewed *The Secretary of the Interior's Standards for the Treatment of Historic Properties* (the Standards), which provide guidelines from the National Park Service to support the sensitive alteration of historic properties.⁵ As addressed in the certified 2015 EIR and defined in Section 15064.5(b)(3) of the *State CEQA Guidelines*, a project that is consistent with the Standards is generally considered to have mitigated impacts to historical resources to a less-than-significant level. The Rehabilitation Standards are the most commonly used treatment for historic buildings; therefore, they have been utilized in the review of the proposed modifications and are included below for reference.⁶

1. A property will 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.
2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.
3. Each property will 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, will not be undertaken.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archaeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be

⁴ Chasteen, Carrie, Richard Hanes and Michelle J. Morrison. *Cultural Resource Treatment Plan for the Weymouth Water Treatment Plant Historic District, City of La Verne, Los Angeles County, California*. Prepared for the Metropolitan Water District of Southern California. July 2016.

⁵ Kay Weeks and Anne Grimmer. *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings*. Washington D.C.: National Park Service. 2017.

⁶ Weeks and Grimmer 2017, 3.



differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

10. New additions and adjacent or related new construction will 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.⁷

Site Visit

Rincon Architectural Historian Rachel Perzel conducted a site visit to the Weymouth Plant on June 23, 2021. During the site visit, Ms. Perzel was escorted by Metropolitan Environmental Specialist, Brenda S. Marines. The site visit focused on visual inspection of the portions of the Weymouth Plant that have the potential to be impacted by the proposed modifications to the original Project, in particular Basin Nos. 1-4 and the Electrical Control Building. During the site visit, the existing conditions and character-defining features of Basin Nos. 1-4 and the Electrical Control Building, as defined in the 2016 *Cultural Resource Treatment Plan for the Weymouth Water Treatment Plant Historic District* ("CRTP") and further discussed below, were identified and documented through field notes and digital photography. Additionally, all portions of Basin Nos. 1-4 and the Electrical Control Building that may be altered by the proposed modifications were identified and photographed.

Findings and Recommendations

Historical Significance and Character-Defining Features

As discussed earlier, the historic district at the Weymouth Plant is eligible for listing in the NRHP and CRHR. The historic district is eligible under Criteria A/1 for its association with the Colorado River Aqueduct; under Criteria B/2 for its association with the productive life of F.E. Weymouth, Chief Engineer for Metropolitan from 1920 to 1941; and under Criteria C/3 for its embodiment of the Spanish Colonial/Mission Revival style of architecture. The CRTP, which provides further insight into the significance and treatment of the historic district, identifies the Basin Nos. 1-4 and the Electrical Control Building as contributing resources and character-defining features of the historic district.⁸ As contributing resources to an NRHP- and CRHR-eligible historic district, Basin Nos. 1-4 and the Electrical Control Building are considered historical resources pursuant to Public Resources Code Section 21084.1.

Character-defining features are distinctive tangible elements and physical features that convey the historical appearance of a property and are indispensable to imparting its historical significance. The identification of character-defining features is necessary for both assessing a project's ability to comply with the Standards and determining potential impacts under CEQA. As defined in Section 15064.5(b) of the *State CEQA Guidelines*, a significant historical resources impact would occur if a project materially impairs a resource by demolishing or adversely altering the physical characteristics that convey its significance and justify its CRHR eligibility.

⁷ Ibid, 76.

⁸ The background research and site visit conducted for this study confirmed the Electrical Control Building is the rectangular building discussed in the CRTP (in the last paragraph of Section 3.3.6, *Filter Building No. 2 and Basins Nos. 5-8*) and identified as the building located at the southeast corner of Basin No. 8. Given that there is no building present at that location, Rincon assumes that this description was a mischaracterization and that the actual location of the Electrical Control Building is at the southeast corner of Basin No. 6. The building description included in the CRTP is consistent with the Electrical Control Building, as observed on the site visit conducted for this study.



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The CRTP identifies the character-defining features of the historic district and ranks them as most significant, significant, or less significant. The CRTP specifically inventories the character-defining features of Basin Nos. 1-4. However, although the CRTP identifies the Electrical Control Building as a most significant feature of the historic district, it does not explicitly inventory its individual character-defining features. Nevertheless, given the Electrical Control Building shares common elements of other contributing buildings, it is assumed the features that define its character would be consistent with those buildings, specifically Filter Building No. 2. The character-defining features of Basin Nos. 1-4 and the Electrical Control Building are presented in Table 1 and Table 2, respectively.

Table 1 Character-Defining Features of Basin Nos. 1-4

Ranking	Character-Defining Features
Most Significant	Floor plan, scale, massing, circulation, and landscape design Mixing basins Settling basins with catwalks Basins Settling basins
Significant	Cast concrete walls with visible form lines Basins 1 and 2 railings Freestanding, pole-mounted lights with bell-shaped metal shades Basins 3 and 4 railings
Less Significant	Reel-type flocculators Rotary sludge scraper Skimming weirs and training walls
Not Historic/Not Character-Defining	Actuators Filtration mechanical equipment Filter media Modern actuators

¹ Although the CRTP identifies the “period actuators” of Basin Nos. 1-4 as significant, the certified 2015 EIR confirms the actuators were in fact were replaced in the 1970s and therefore fall outside of the period of significance of the historic district (see page 3.4-18 of the certified 2015 EIR). As such, the actuators are not considered character-defining features of Basin Nos. 1-4.

Source: Chasteen, Hanes, and Morrison 2016



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Table 2 Character-Defining Features of the Electrical Control Building

Ranking	Character-Defining Features
Most Significant	Spanish Colonial/Mission revival architectural style
Significant	Cast concrete walls with visible form lines Spanish tile roof Four-light, metal, hopper windows over two-light, metal, fixed-pane windows
Less Significant	Clear, single-pane window glazing Period doors and associated hardware
Not Historic/Not Character-Defining	Interior Non-original metal roll-up door

Historical Resource Impact Analysis

Basin Nos. 1-4 Rehabilitation

The proposed modifications include the rehabilitation of Basin Nos. 1-4, specifically the replacement of eight inlet gates and associated actuators, and gate guides, two MCCs, two gate power panels, and local control panels as well as installation of a new remote I/O device. These modifications are consistent with Project elements that were proposed for the Basin Nos. 5-8 Rehabilitation project and analyzed in the certified 2015 EIR for the original Project, which also included the replacement of basin inlet gates and gate guides among other elements. Like Basin Nos. 1-4, Basin Nos. 5-8 are contributing elements to the historic district, and the analysis presented in the certified 2015 EIR concluded the following impacts would occur as a result of the replacement of the basin gates and gate guides for Basin Nos. 5-8:

The inlet gates are engineered elements critical to the operation of the filtration [treatment] process. While not visible from the surface, they are a significant design component. Removal and replacement of the inlet gates would result in the removal and replacement of original material, although the design and operation of the inlet gates will not change substantially. Nonetheless, the proposed improvements have the potential to cause an adverse change in the significance of the historic resource.⁹

To address these potential impacts to Basin Nos. 5-8, the certified 2015 EIR required implementation of Mitigation Measure CUL-1, which included documentation of the history of the resource's technology to HAER Standards Level 2, as well as Mitigation Measure CUL-2(b), which included retaining an actuator (located south of Basins 5 to 8) for display. The certified 2015 EIR determined implementation of these mitigation measures would reduce impacts to Basin Nos. 5-8 to a less than significant level.

As discussed earlier, the proposed modifications to the original Project related to Basin Nos. 1-4 are consistent with those analyzed for Basin Nos. 5-8 in the certified 2015 EIR. The proposed modifications would include replacement of the inlet gates and gate guides of Basin Nos. 1-4, which are considered

⁹ Final Environmental Impact Report for the F. E. Weymouth Water Treatment Plant Improvements Program. Metropolitan Water District of Southern California. (SCH No. 2013121074), April 2015.



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character-defining in the certified 2015 EIR and the subsequent CRTP. The inlet gates and gate guides are original to the Weymouth Plant's initial design and construction and represent intact historic fabric. Therefore, the replacement of the Basin Nos. 1-4 inlet gates, and gate guides would also have the potential to result in a significant adverse change in the significance of a historical resource due to the replacement of engineered elements and loss of original material. Implementation of Mitigation Measure CUL-1 is recommended for the proposed modifications to address this potentially significant impact through photo-documentation to HAER standards. However, because the associated actuators at Basin Nos. 1-4 were replaced in the 1970s and therefore fall outside of the period of significance of the historic district, the actuators are not considered character-defining features of Basin Nos. 1-4, and no historic impacts related to these components would occur. As such, implementation of Mitigation Measure CUL-1 is not recommended for these components. (Mitigation Measures CUL-2[a] and CUL-2[b] were only required for the filter cells and the Basin Nos. 5-8 "period actuators" components, respectively, in the certified 2015 EIR. Therefore, these mitigation measures were determined not to be necessary for the project elements specifically relating to the replacement of the inlet gates, associated actuators, and gate guides for Basin Nos. 1-4, especially given that the Basin Nos. 1-4 actuators were replaced in the 1970s and therefore fall outside the period of significance.) The certified 2015 EIR concluded implementation of Mitigation Measure CUL-1 would reduce impacts associated with the replacement of the inlet gates and gate guides of Basin Nos. 5-8 to a less-than-significant level. Similarly, implementation of Mitigation Measure CUL-1 to the Basin Nos. 1-4 project would mitigate impacts to a less-than-significant level. Implementation of Mitigation Measures CUL-2(a) and CUL-2(b) is not recommended because the inlet gate actuators have been replaced and modified since the Plant's original construction in 1939. Therefore, no further mitigation is required.

Electrical Control Building Improvements

Although the original Project did not propose alterations to the Electrical Control Building, it is located within the boundaries of the Weymouth Plant and the historic district. The Electrical Control Building Improvement project includes the installation of two MCCs; a wall-mounted air conditioning unit; railings; flooring; removable guardrails on the loading dock and replacement of an RTU and electrical panels (interior alterations) as well as installation of electrical conduits; replacement of three exterior doors and windows and the replacement of the west elevation roll-up door with double-swing doors (exterior alterations).

As previously noted, the Electrical Control Building is identified in the CRTP as a most significant feature of the historic district. The CRTP discusses a range of potential project-related impacts and provides recommendations and treatment measures for projects involving most significant buildings and features. The CRTP provides the following examples of project activities that could pose a substantial adverse change to a feature ranked most significant, such as the Electrical Control Building:

- Demolition of key architectural features
- Replacement of the hipped roof with Spanish tile with dissimilar forms or materials
- Minor alterations to the Mission-style parapet
- Reconfiguration of certain spaces such as entry rotunda, arcaded walkways
- Removal of terrazzo flooring, period tile, or ox-eye windows



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- Removal and replacement of window frames and openings that are dissimilar in style (patterns and configuration of lights), scale, or massing¹⁰

Many of the elements included in the Electrical Control Building Improvements project would occur on the interior of the Electrical Control Building. As identified in Table 2, the interior of the Electrical Control Building is not considered historically significant and does not contain character-defining features. Therefore, the improvements that would occur on the building's interior (i.e., installation of two MCCs, a wall-mounted air conditioning unit, railings, flooring and removable guardrails on the loading dock and replacement of an RTU and electrical panels) comply with the Standards because they would not negatively alter any character-defining features of the Electrical Control Building. The installation of electrical conduits on the exterior of the Electrical Control Building would be considered a "minor alteration" as defined in the CRTP because it entails the addition of relatively diminutive features to the building and requires minimal intervention to attach.¹¹ Because this alteration would not require the removal of original material or significantly alter the building's current appearance, it complies with the Standards and is consistent with the guidance of the CRTP.

The Electrical Control Building Improvements project also includes the replacement of all the doors and windows on the Electrical Control Building. As detailed in Table 2 under *Historical Significance and Character-Defining Features*, the windows are considered significant character-defining features while the period doors are considered less significant. The metal roll-up door, which is proposed to be replaced, is not original to the building and is not considered character-defining. Although the designs of the window and door replacements have not yet been finalized, Metropolitan has committed to replacing the doors and windows in kind (i.e., they will be constructed of a consistent material and feature a consistent number and configuration of windowpanes as the building's current windows and doors, which appear original) and installing the new windows and doors in a manner that would not require the widening of the existing openings.

The in-kind replacement of period windows and doors is an intervention that generally complies with the Standards and would not pose a substantial adverse change to the character-defining features of the Electrical Control Building ranked as significant or most significant in Table 2. As such, the proposed replacement of the windows and doors would not require additional mitigation in accordance with the certified 2015 EIR, which states impacts are less than significant when project elements comply with the Standards. Therefore, no further mitigation is required.

Conclusions

As detailed above, impacts to historical resources associated with the proposed modifications to the original Project would be generally consistent with the impacts analyzed in the certified 2015 EIR for original Project, and the mitigation adopted in the certified 2015 EIR would also be sufficient to mitigate the historical resource impacts of the proposed modifications to a less-than-significant level. If project design progresses and deviates from that described above, additional CEQA analysis would be necessary.

¹⁰ Chasteen, Hanes, and Morrison 2016, 64.

¹¹ The CRTP differentiates between "major alterations," such as demolition or the reconfiguration or the substantial removal of historic materials or features, and "minor alterations," which would not require the removal of original material, changes in the current appearance, or reconfiguration of the elements (changes in size, shape, depth, or appearance). See Chasteen, Hanes, and Morrison 2016, 59-71.



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Should you have any questions or comments regarding this assessment, please do not hesitate to contact us at 213-788-4842, or streffers@rinconconsultants.com.

Sincerely,

Rincon Consultants, Inc.

A handwritten signature in black ink, appearing to read "Steven Treffers". The signature is fluid and cursive, with a prominent "S" and "T".

Steven Treffers, M.H.P.

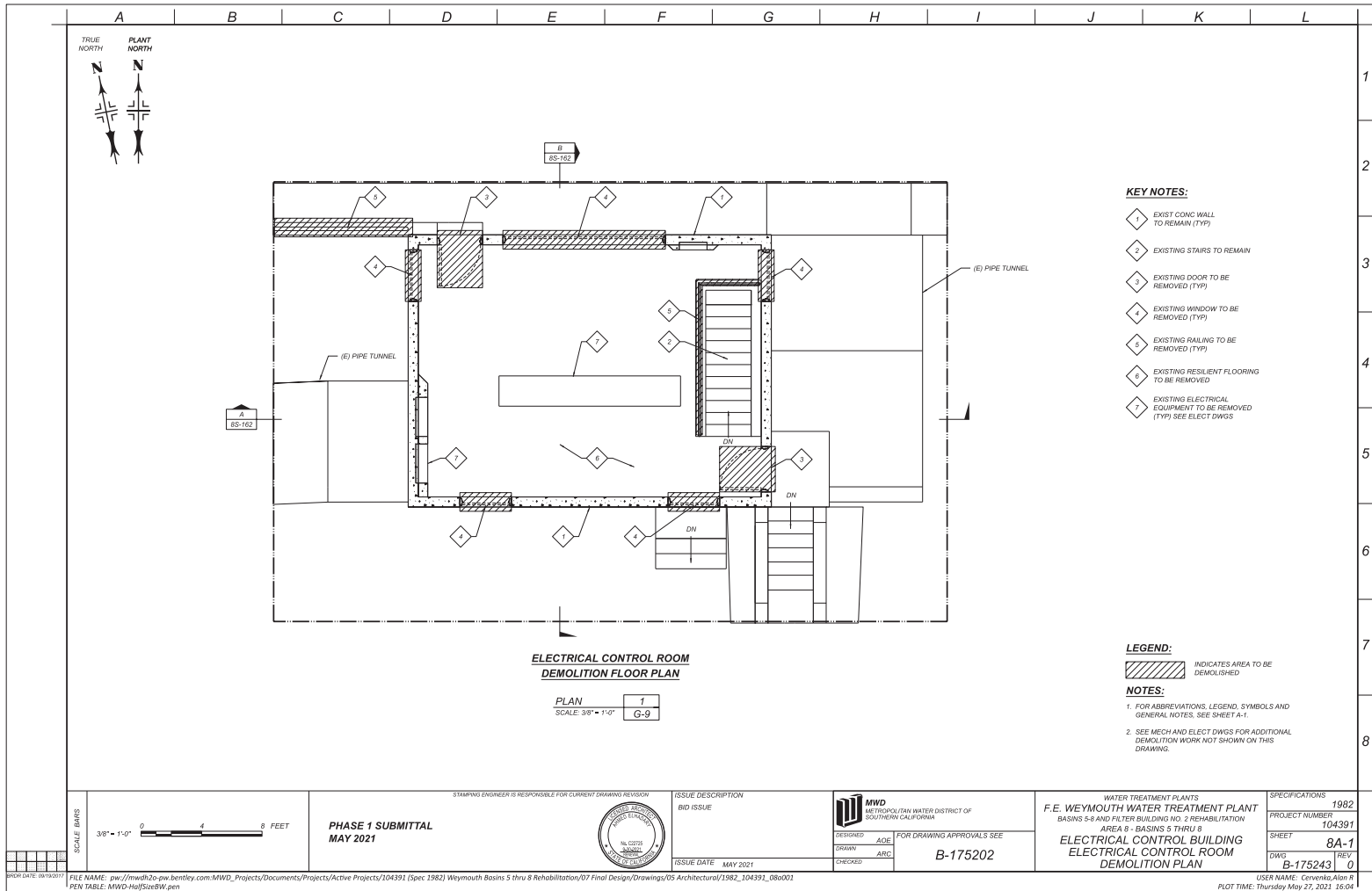
Senior Architectural Historian

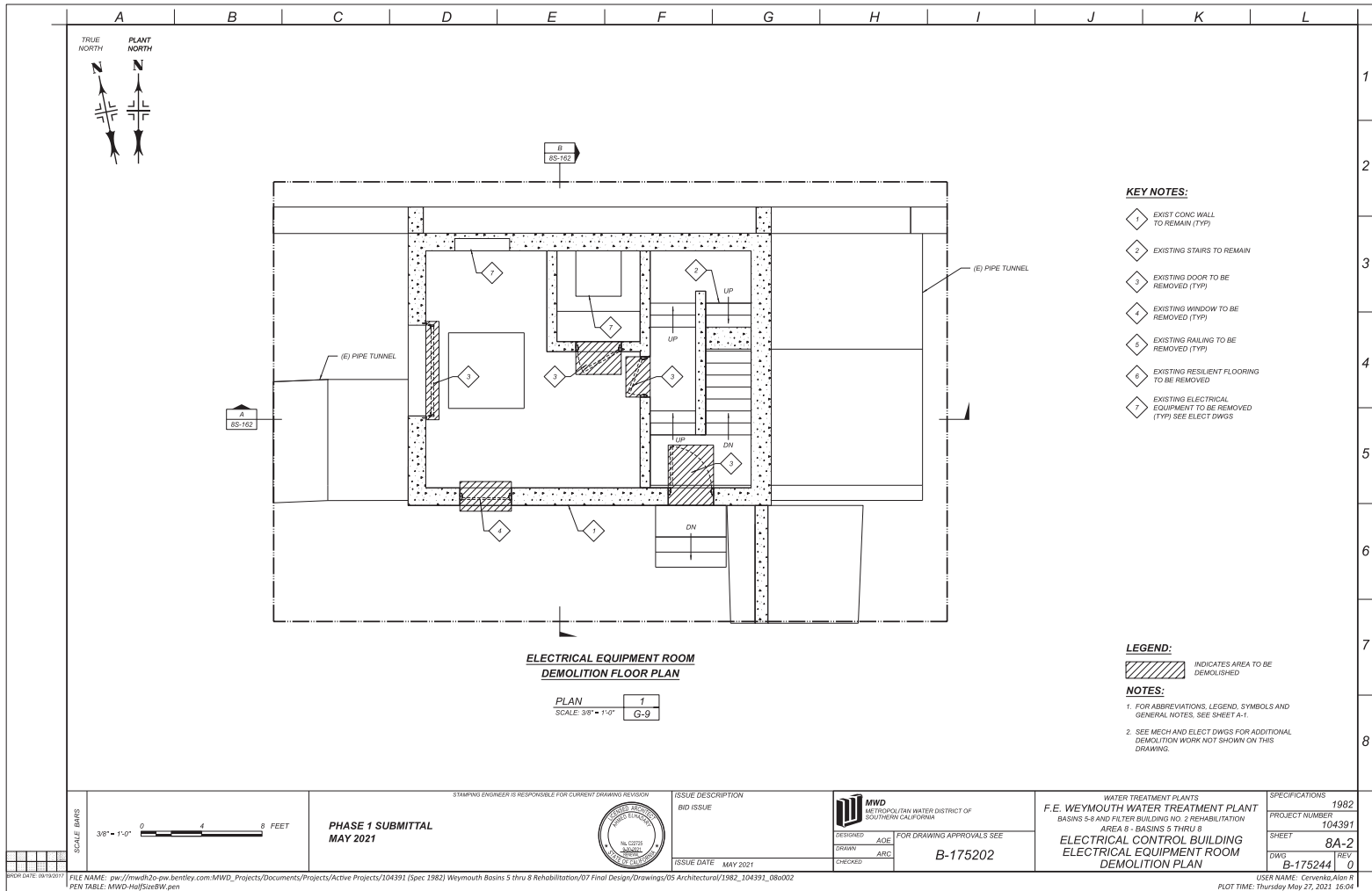
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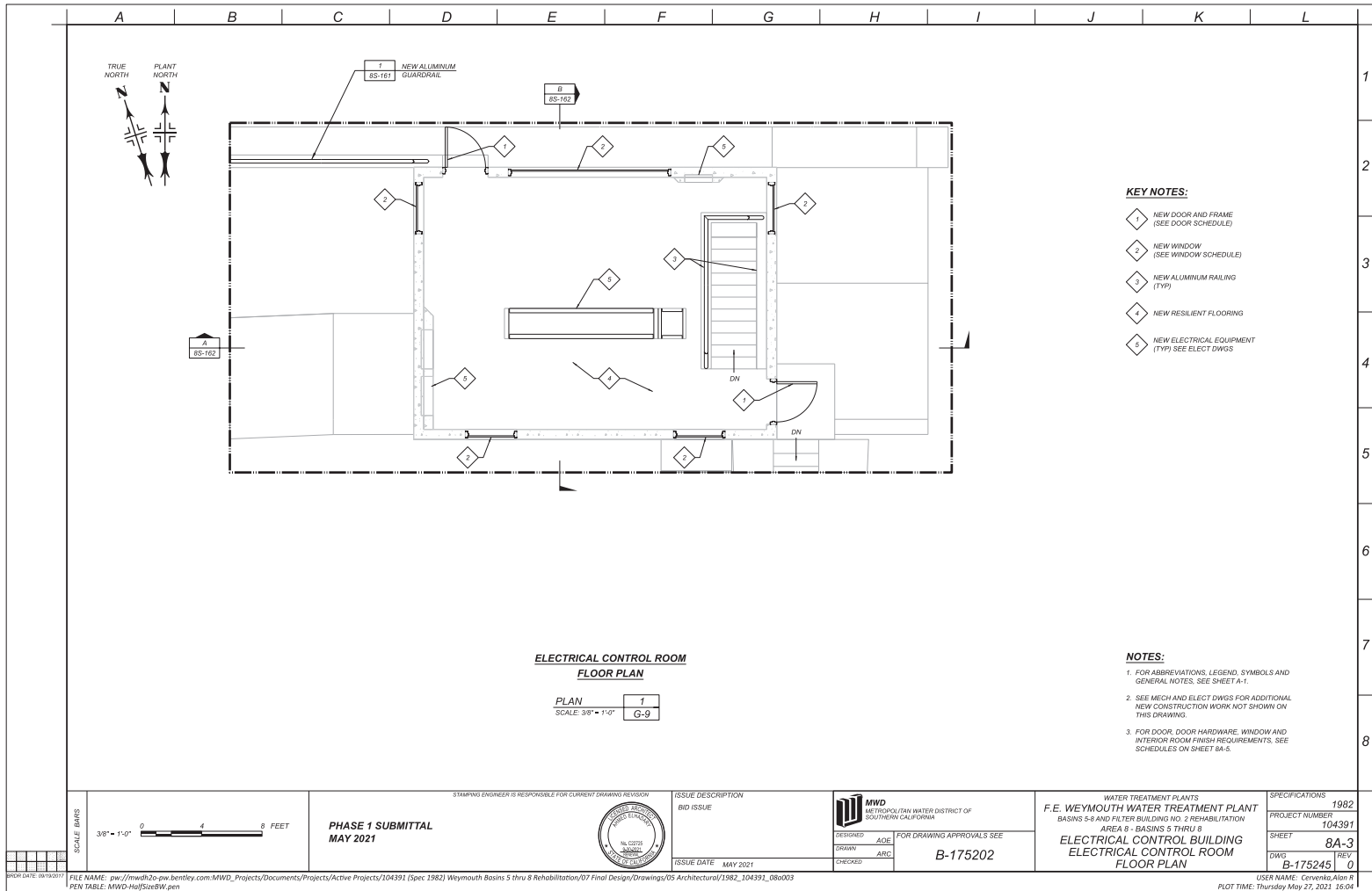
Attachment 1 Proposed Project Plans for the Electrical Control Building and Basin Nos. 1-4

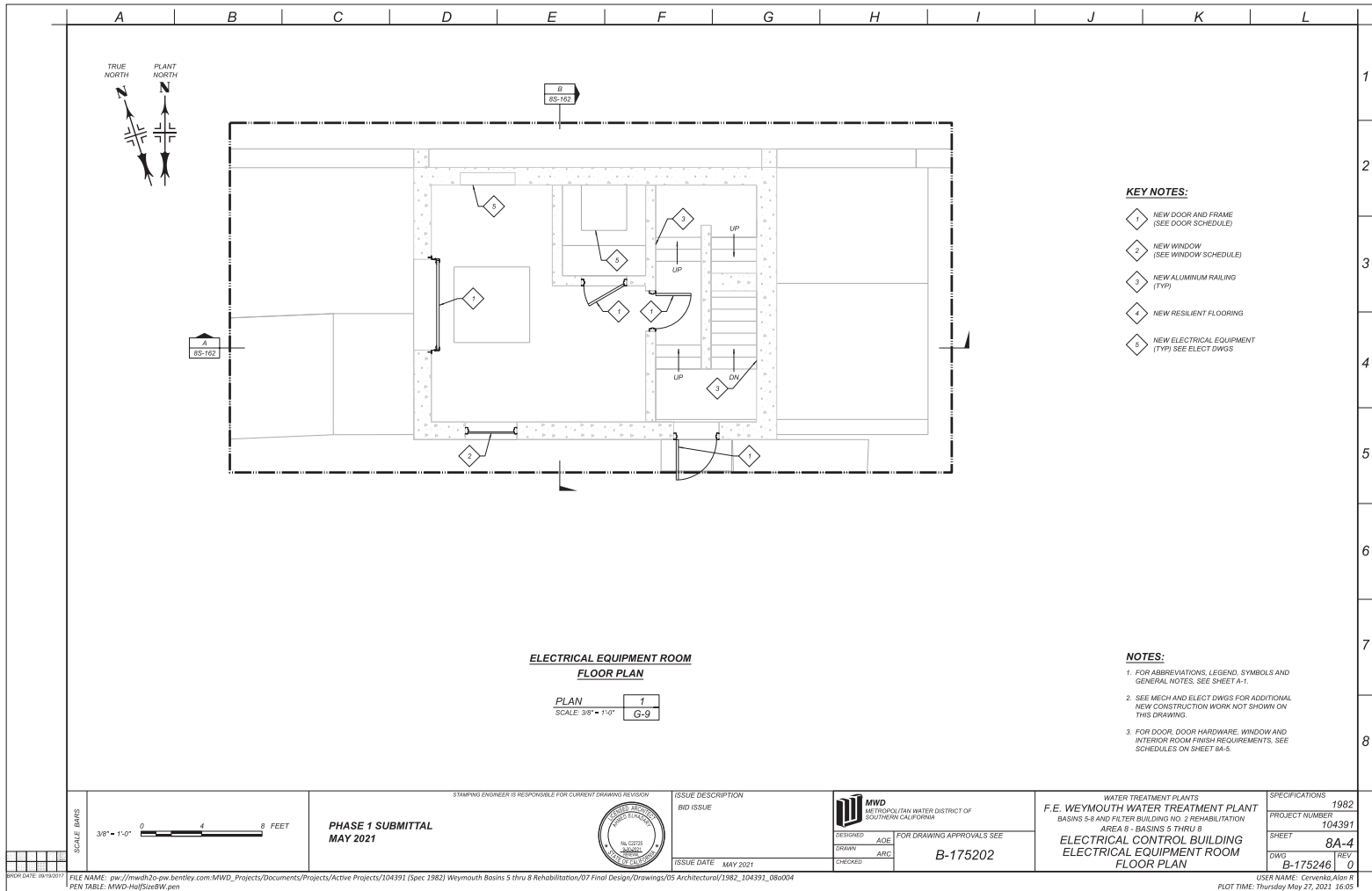
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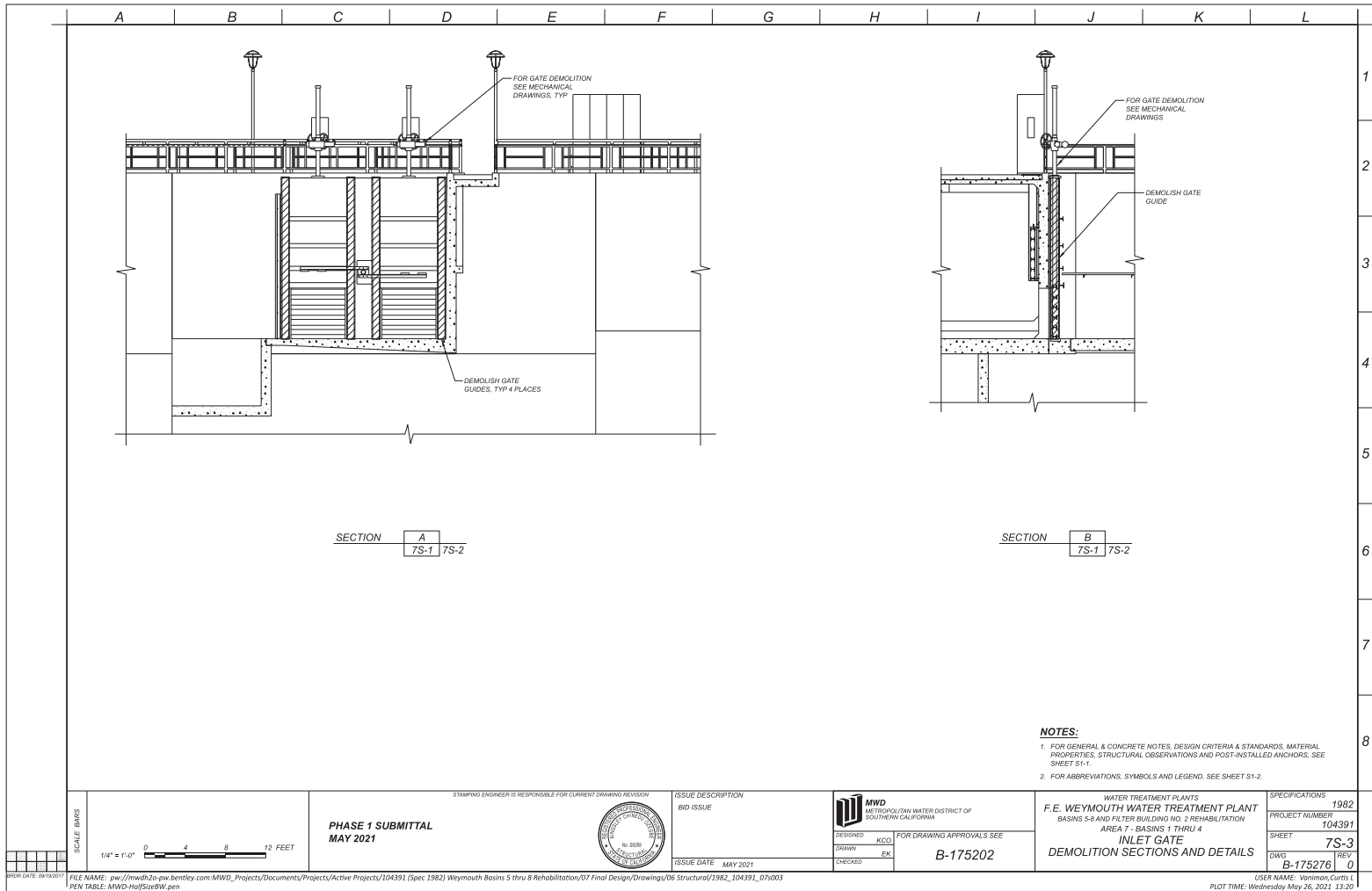
Proposed Project Plans for the Electrical Control Building and Basin Nos. 1-4

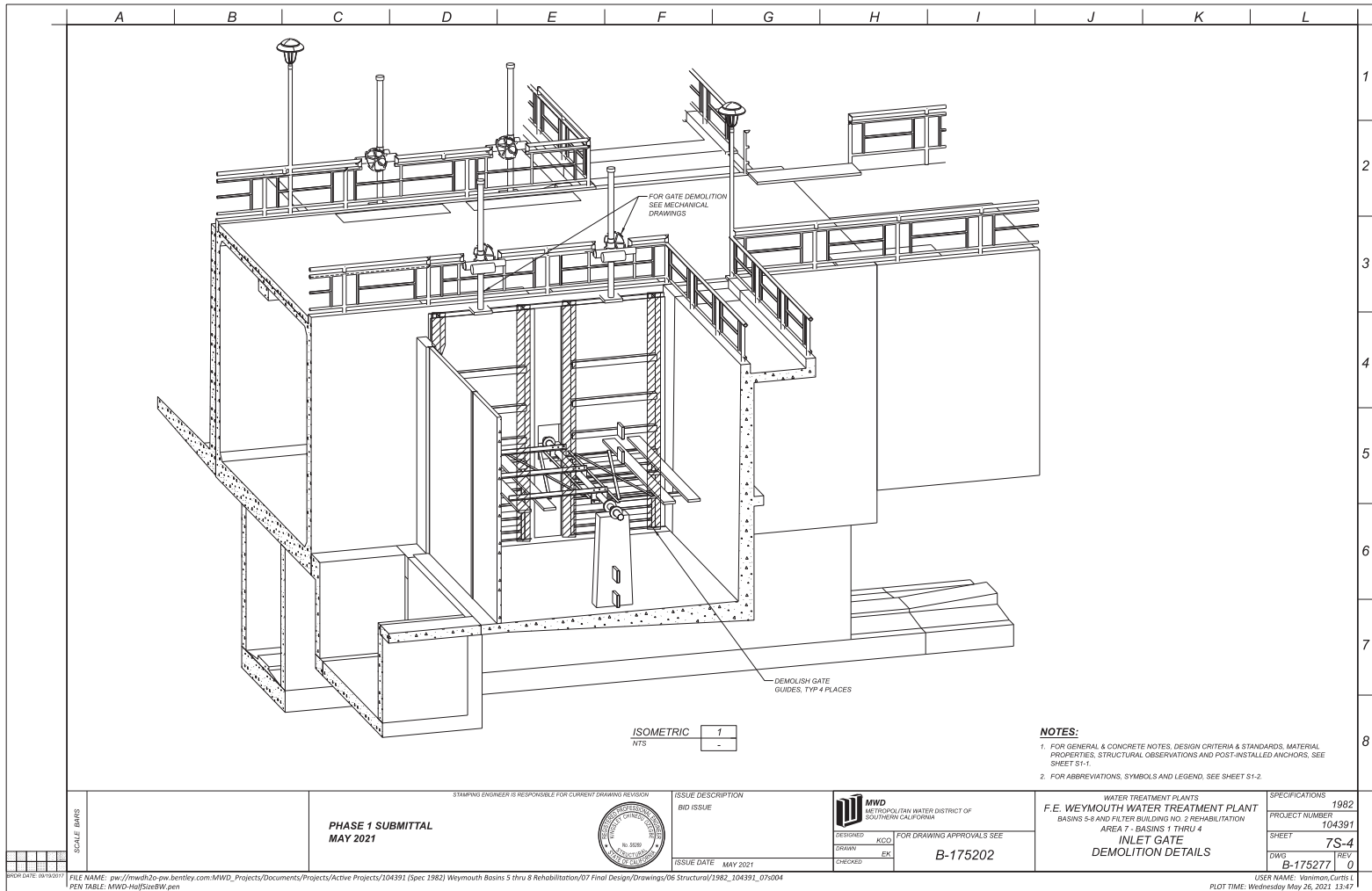


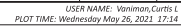


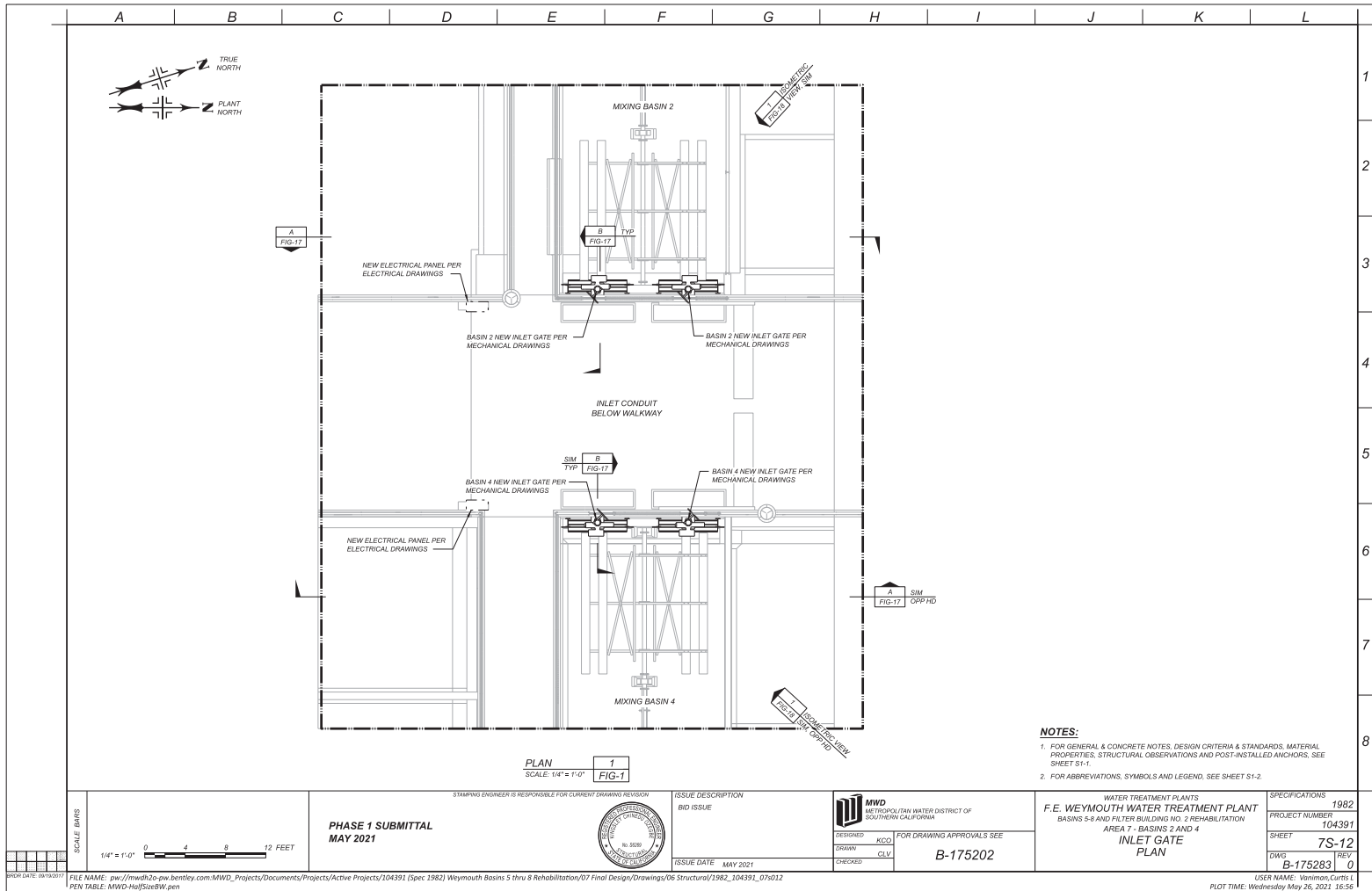


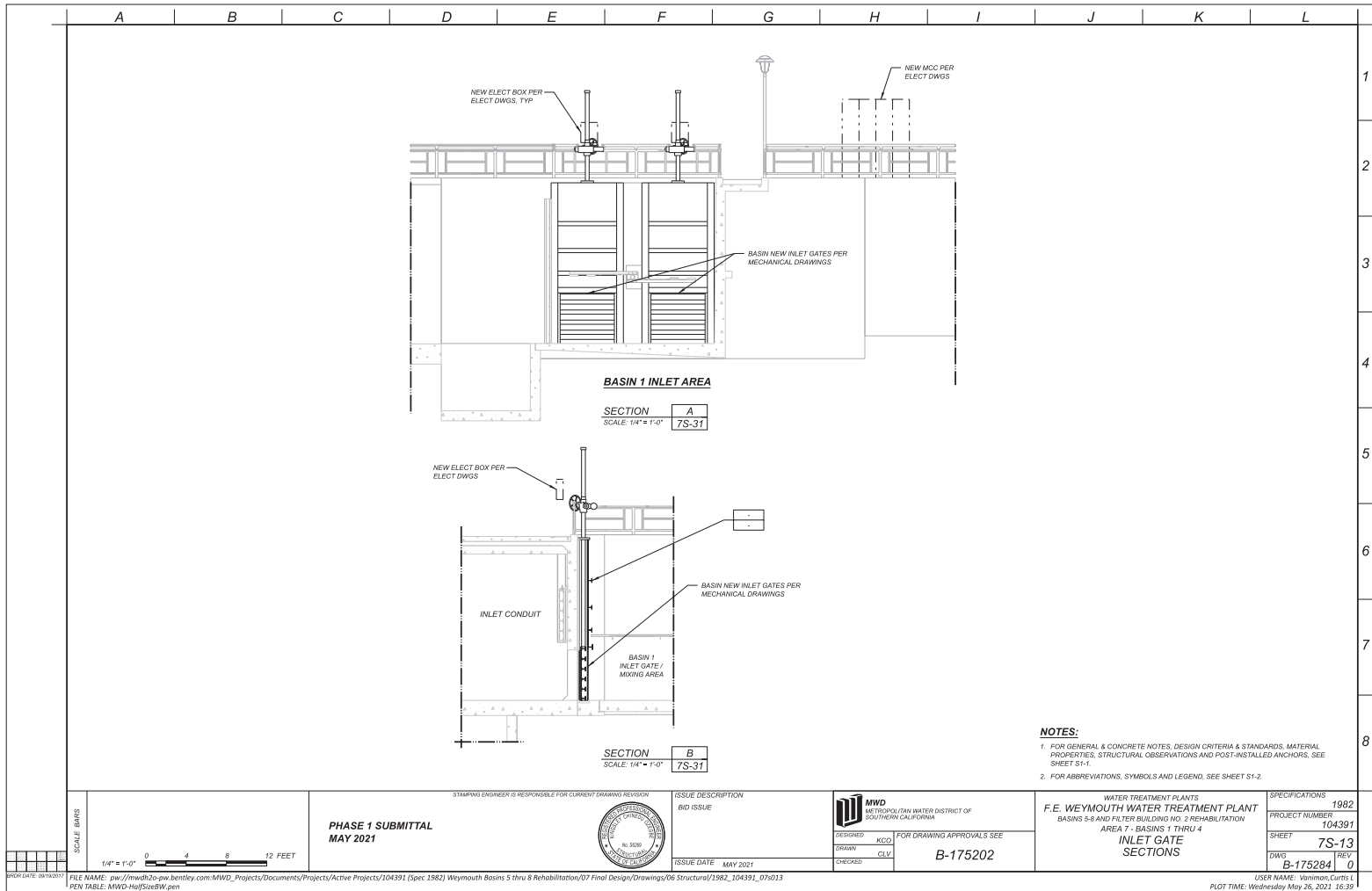


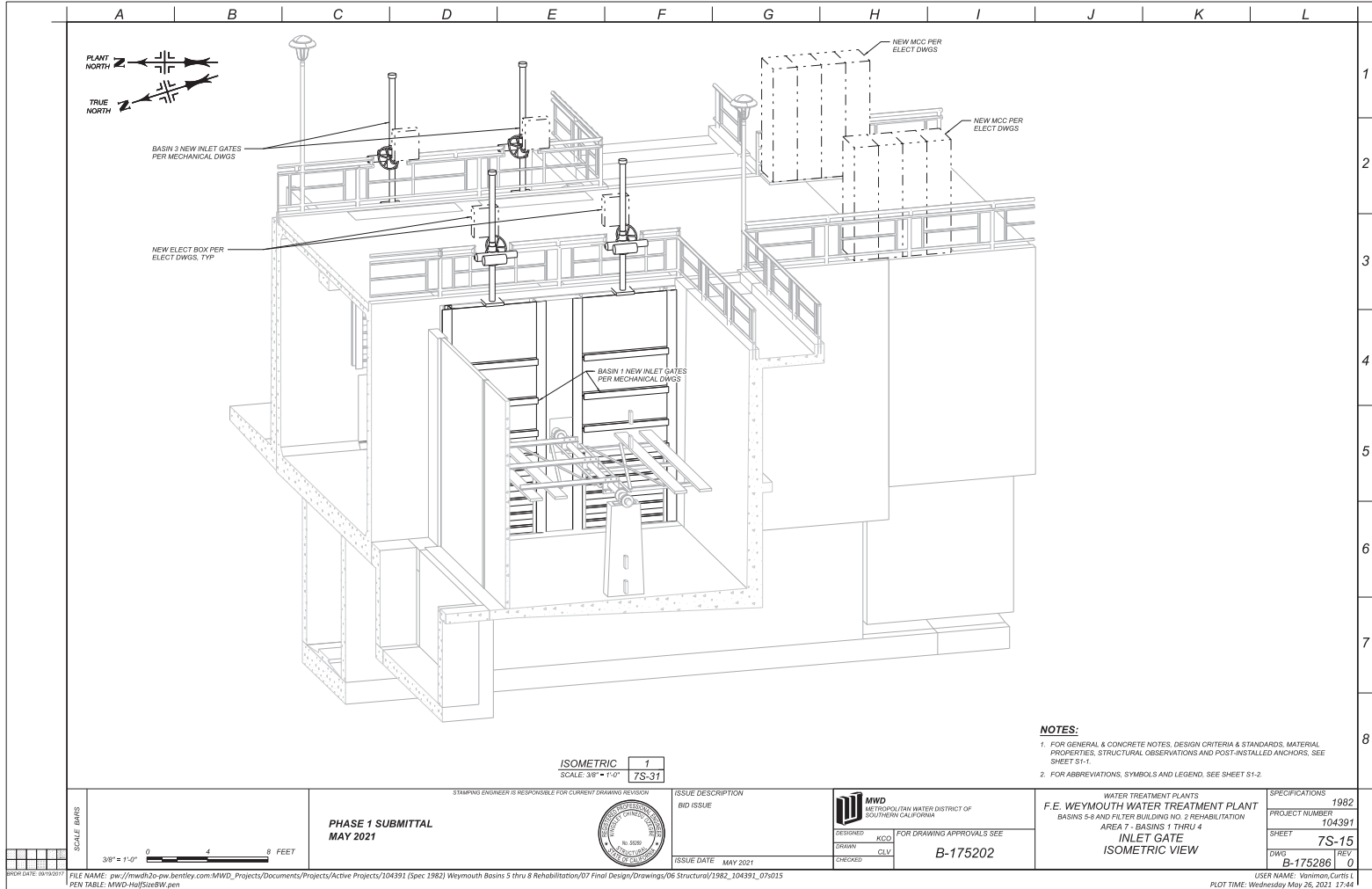












Appendix B

Energy Calculations

Basin Nos. 1-4 Rehabilitation and Electrical Control Building Improvements

Last Updated: July 7, 2021

Compression-Ignition Engine Brake-Specific Fuel Consumption (BSFC) Factors [1]:

HP: 0 to 100	0.0588	HP: Greater than 100	0.0529
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Values above are expressed in gallons per horsepower-hour/BSFC.

CONSTRUCTION EQUIPMENT						
Construction Equipment	#	Hours per Day	Load Horsepower	Factor	Construction Phase	Fuel Used (gallons)
Rough Terrain Forklifts	2	8	100	0.4	Construction Activities	4,964.40
Aerial Lifts	2	8	63	0.31	Construction Activities	2,423.87
Other Construction Equipment	2	8	172	0.42	Construction Activities	8,064.74
Forklifts	4	8	89	0.2	Construction Activities	4,418.32
Concrete/Industrial Saws	2	8	81	0.73	Construction Activities	7,338.63
Welders	4	8	46	0.45	Construction Activities	5,138.16
Air Compressors	8	8	78	0.48	Construction Activities	18,586.72
Rubber Tired Loaders	1	8	203	0.36	Construction Activities	4,079.26
Excavators	1	8	158	0.38	Construction Activities	3,351.38
Generator Sets	2	8	84	0.74	Construction Activities	7,714.68
Pumps	4	8	84	0.74	Construction Activities	15,429.36
Other General Industrial Equipment	2	4	50	0.34	Construction Activities	1,054.94
Other Construction Equipment	1	8	51	0.42	Construction Activities	1,329.22
Cranes	3	8	500	0.29	Construction Activities	24,281.31
Cranes	2	8	231	0.29	Construction Activities	7,478.64
Tractors/Loaders/Backhoes	1	8	97	0.37	Construction Activities	2,227.15
Total Fuel Used						117,880.77
						(Gallons)

Construction Phase	Days of Operation
Construction Activities	132
Total Days	132

WORKER TRIPS				
Construction Phase	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
Construction Activities	24.4	56	14.7	4453.38
Fuel				4,453.38

HAULING AND VENDOR TRIPS				
Trip Class	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
HAULING TRIPS				
Construction Activities	7.5	8	20.0	21.33
Fuel				21.33
VENDOR TRIPS				
Construction Activities	7.5	106	6.9	12872.64
Fuel				12,872.64

Total Gasoline Consumption (gallons)	4,453.38
Total Diesel Consumption (gallons)	130,774.74

Sources:

[1] United States Environmental Protection Agency. 2018. *Exhaust and Crankcase Emission Factors for Nonroad Compression-Ignition Engines in MOVES2014b*. July 2018. Available at: <https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100UXEN.pdf>.

[2] United States Department of Transportation, Bureau of Transportation Statistics. 2019. *National Transportation Statistics 2019*. Available at: <https://www.bts.gov/topics/national-transportation-statistics>.

Appendix C

Greenhouse Gas Modeling

CalEEMod Version: CalEEMod.2020.4.0

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Date: 8/25/2021 4:51 PM

Weymouth Basin Nos. 1-4 and Electrical Control Building - Total Construction - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Weymouth Basin Nos. 1-4 and Electrical Control Building - Total Construction**

South Coast AQMD Air District, Annual

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	4.84	Acre	4.84	210,830.40	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	31
Climate Zone	9			Operational Year	2024
Utility Company	User Defined				
CO2 Intensity (lb/MW hr)	0	CH4 Intensity (lb/MW hr)	0	N2O Intensity (lb/MW hr)	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Construction only - no operational energy usage.

Land Use - Approximate area of Basin Nos. 1-4 and Electrical Control Bldg

Construction Phase - 21 month extension of construction schedule

Off-road Equipment - Construction list based on 2015 EIR.

Trips and VMT - 40 daily one-way pickup truck trips (32 one-way worker trips + 8 pick-up truck trips), 6 daily one-way concrete truck trips, 12 one-way haul trips for infrastructure removal/delivery + 6 dump truck/flat-bed trailer trips

Demolition - No structural demolition.

Grading - No soil import/export

Vehicle Trips - No new O&M activities.

Woodstoves - No new O&M activities.

Consumer Products - No new O&M activities.

Area Coating - No new O&M activities.

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Landscape Equipment - No new O&M activities.

Energy Use - No new O&M activities.

Water And Wastewater - No new O&M activities.

Solid Waste - No new O&M activities.

Operational Off-Road Equipment - No new O&M activities.

Stationary Sources - Emergency Generators and Fire Pumps - No new O&M activities.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Parking	12650	0
tblConstructionPhase	NumDays	230.00	458.00
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	0
tblLandscapeEquipment	NumberSummerDays	250	0
tblOffRoadEquipment	HorsePower	231.00	500.00
tblOffRoadEquipment	HorsePower	88.00	50.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	4.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Construction Activities
tblOffRoadEquipment	PhaseName		Construction Activities
tblOffRoadEquipment	PhaseName		Construction Activities

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOffRoadEquipment	PhaseName		Construction Activities
tblOffRoadEquipment	PhaseName		Construction Activities
tblOffRoadEquipment	PhaseName		Construction Activities
tblOffRoadEquipment	PhaseName		Construction Activities
tblOffRoadEquipment	PhaseName		Construction Activities
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	HaulingTripNumber	0.00	18.00
tblTripsAndVMT	VendorTripNumber	35.00	6.00
tblTripsAndVMT	WorkerTripNumber	89.00	40.00

2.0 Emissions Summary

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Weymouth Basin Nos. 1-4 and Electrical Control Building - Total Construction - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.1 Overall Construction****Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	1.0557	9.0347	10.0139	0.0180	0.0523	0.4398	0.4921	0.0140	0.4227	0.4367	0.0000	1,552.465 5	1,552.465 5	0.2833	2.8700e- 003	1,560.402 2
2023	1.0608	8.9435	10.6888	0.0196	0.0571	0.4157	0.4727	0.0153	0.3995	0.4147	0.0000	1,692.600 2	1,692.600 2	0.3045	2.9500e- 003	1,701.090 2
Maximum	1.0608	9.0347	10.6888	0.0196	0.0571	0.4398	0.4921	0.0153	0.4227	0.4367	0.0000	1,692.600 2	1,692.600 2	0.3045	2.9500e- 003	1,701.090 2

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	1.0557	9.0347	10.0139	0.0180	0.0523	0.4398	0.4921	0.0140	0.4227	0.4367	0.0000	1,552.463 7	1,552.463 7	0.2833	2.8700e- 003	1,560.400 5
2023	1.0608	8.9435	10.6888	0.0196	0.0571	0.4157	0.4727	0.0153	0.3995	0.4147	0.0000	1,692.598 2	1,692.598 2	0.3045	2.9500e- 003	1,701.088 3
Maximum	1.0608	9.0347	10.6888	0.0196	0.0571	0.4398	0.4921	0.0153	0.4227	0.4367	0.0000	1,692.598 2	1,692.598 2	0.3045	2.9500e- 003	1,701.088 3

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	3-1-2022	5-31-2022	3.0274	3.0274
2	6-1-2022	8-31-2022	3.0271	3.0271
3	9-1-2022	11-30-2022	2.9948	2.9948
4	12-1-2022	2-28-2023	2.7845	2.7845
5	3-1-2023	5-31-2023	2.7504	2.7504
6	6-1-2023	8-31-2023	2.7502	2.7502
7	9-1-2023	9-30-2023	0.8968	0.8968
		Highest	3.0274	3.0274

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**2.2 Overall Operational****Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Construction Activities	Building Construction	3/1/2022	11/30/2023	5	458	

Acres of Grading (Site Preparation Phase): 0

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**Acres of Grading (Grading Phase): 0****Acres of Paving: 4.84****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Construction Activities	Aerial Lifts	2	8.00	63	0.31
Construction Activities	Air Compressors	6	8.00	78	0.48
Construction Activities	Concrete/Industrial Saws	2	8.00	81	0.73
Construction Activities	Cranes	3	8.00	500	0.29
Construction Activities	Excavators	1	8.00	158	0.38
Construction Activities	Forklifts	3	8.00	89	0.20
Construction Activities	Generator Sets	2	8.00	84	0.74
Construction Activities	Other Construction Equipment	2	8.00	172	0.42
Construction Activities	Other General Industrial Equipment	2	8.00	50	0.34
Construction Activities	Pumps	4	8.00	84	0.74
Construction Activities	Rubber Tired Loaders	1	8.00	203	0.36
Construction Activities	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Construction Activities	Welders	3	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Construction Activities	41	40.00	6.00	18.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Construction Activities - 2022****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.0398	8.9901	9.8477	0.0174		0.4392	0.4392		0.4221	0.4221	0.0000	1,500.8393	1,500.8393	0.2818	0.0000	1,507.8839
Total	1.0398	8.9901	9.8477	0.0174		0.4392	0.4392		0.4221	0.4221	0.0000	1,500.8393	1,500.8393	0.2818	0.0000	1,507.8839

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	7.1000e-004	1.6000e-004	0.0000	7.0000e-005	1.0000e-005	8.0000e-005	2.0000e-005	1.0000e-005	3.0000e-005	0.0000	0.2592	0.2592	1.0000e-005	4.0000e-005	0.2718
Vendor	1.1900e-003	0.0321	0.0107	1.3000e-004	4.1400e-003	3.2000e-004	4.4600e-003	1.2000e-003	3.1000e-004	1.5000e-003	0.0000	12.2609	12.2609	4.1000e-004	1.7800e-003	12.8013
Worker	0.0147	0.0119	0.1554	4.2000e-004	0.0481	2.9000e-004	0.0484	0.0128	2.7000e-004	0.0130	0.0000	39.1061	39.1061	1.0800e-003	1.0500e-003	39.4452
Total	0.0159	0.0447	0.1662	5.5000e-004	0.0523	6.2000e-004	0.0529	0.0140	5.9000e-004	0.0146	0.0000	51.6262	51.6262	1.5000e-003	2.8700e-003	52.5184

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Construction Activities - 2022****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.0398	8.9901	9.8477	0.0174		0.4392	0.4392		0.4221	0.4221	0.0000	1,500.8375	1,500.8375	0.2818	0.0000	1,507.8821
Total	1.0398	8.9901	9.8477	0.0174		0.4392	0.4392		0.4221	0.4221	0.0000	1,500.8375	1,500.8375	0.2818	0.0000	1,507.8821

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	7.1000e-004	1.6000e-004	0.0000	7.0000e-005	1.0000e-005	8.0000e-005	2.0000e-005	1.0000e-005	3.0000e-005	0.0000	0.2592	0.2592	1.0000e-005	4.0000e-005	0.2718
Vendor	1.1900e-003	0.0321	0.0107	1.3000e-004	4.1400e-003	3.2000e-004	4.4600e-003	1.2000e-003	3.1000e-004	1.5000e-003	0.0000	12.2609	12.2609	4.1000e-004	1.7800e-003	12.8013
Worker	0.0147	0.0119	0.1554	4.2000e-004	0.0481	2.9000e-004	0.0484	0.0128	2.7000e-004	0.0130	0.0000	39.1061	39.1061	1.0800e-003	1.0500e-003	39.4452
Total	0.0159	0.0447	0.1662	5.5000e-004	0.0523	6.2000e-004	0.0529	0.0140	5.9000e-004	0.0146	0.0000	51.6262	51.6262	1.5000e-003	2.8700e-003	52.5184

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Construction Activities - 2023****Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.0451	8.9042	10.5218	0.0190		0.4152	0.4152		0.3991	0.3991	0.0000	1,638.0168	1,638.0168	0.3030	0.0000	1,645.5911
Total	1.0451	8.9042	10.5218	0.0190		0.4152	0.4152		0.3991	0.3991	0.0000	1,638.0168	1,638.0168	0.3030	0.0000	1,645.5911

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	6.0000e-004	1.6000e-004	0.0000	8.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	3.0000e-005	0.0000	0.2679	0.2679	1.0000e-005	4.0000e-005	0.2809
Vendor	7.7000e-004	0.0273	0.0104	1.3000e-004	4.5200e-003	1.5000e-004	4.6700e-003	1.3000e-003	1.5000e-004	1.4500e-003	0.0000	12.7606	12.7606	4.3000e-004	1.8500e-003	13.3222
Worker	0.0149	0.0115	0.1564	4.5000e-004	0.0524	3.0000e-004	0.0527	0.0139	2.8000e-004	0.0142	0.0000	41.5549	41.5549	1.0500e-003	1.0600e-003	41.8959
Total	0.0157	0.0394	0.1670	5.8000e-004	0.0570	4.5000e-004	0.0575	0.0153	4.3000e-004	0.0157	0.0000	54.5834	54.5834	1.4900e-003	2.9500e-003	55.4991

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**3.2 Construction Activities - 2023****Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	1.0451	8.9042	10.5218	0.0190		0.4152	0.4152		0.3991	0.3991	0.0000	1,638.0149	1,638.0149	0.3030	0.0000	1,645.5892
Total	1.0451	8.9042	10.5218	0.0190		0.4152	0.4152		0.3991	0.3991	0.0000	1,638.0149	1,638.0149	0.3030	0.0000	1,645.5892

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.0000e-005	6.0000e-004	1.6000e-004	0.0000	8.0000e-005	0.0000	9.0000e-005	2.0000e-005	0.0000	3.0000e-005	0.0000	0.2679	0.2679	1.0000e-005	4.0000e-005	0.2809
Vendor	7.7000e-004	0.0273	0.0104	1.3000e-004	4.5200e-003	1.5000e-004	4.6700e-003	1.3000e-003	1.5000e-004	1.4500e-003	0.0000	12.7606	12.7606	4.3000e-004	1.8500e-003	13.3222
Worker	0.0149	0.0115	0.1564	4.5000e-004	0.0524	3.0000e-004	0.0527	0.0139	2.8000e-004	0.0142	0.0000	41.5549	41.5549	1.0500e-003	1.0600e-003	41.8959
Total	0.0157	0.0394	0.1670	5.8000e-004	0.0570	4.5000e-004	0.0575	0.0153	4.3000e-004	0.0157	0.0000	54.5834	54.5834	1.4900e-003	2.9500e-003	55.4991

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.542450	0.061470	0.185138	0.129299	0.023799	0.006448	0.011958	0.009209	0.000810	0.000503	0.024446	0.000751	0.003721

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

[illegible]

Mitigated

[illegible]

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Weymouth Basin Nos. 1-4 and Electrical Control Building - Total Construction - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**5.3 Energy by Land Use - Electricity****Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

6.0 Area Detail**6.1 Mitigation Measures Area**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

[illegible]

6.2 Area by SubCategory

Unmitigated

[illegible]

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Weymouth Basin Nos. 1-4 and Electrical Control Building - Total Construction - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**6.2 Area by SubCategory****Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

7.0 Water Detail**7.1 Mitigation Measures Water**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

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Weymouth Basin Nos. 1-4 and Electrical Control Building - Total Construction - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail**8.1 Mitigation Measures Waste****Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

Weymouth Basin Nos. 1-4 and Electrical Control Building - Total Construction - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

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	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

7-5

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

5/10/2022 Board Meeting

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	-----------	-------------	-------------	-----------

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Weymouth Basin Nos. 1-4 and Electrical Control Building - Total Construction - South Coast AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**10.0 Stationary Equipment**

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation



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Metropolitan Water District

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Completed	Security Checked	11/16/2021 11:14:22 AM
Payment Events	Status	Timestamps