

APPENDIX F

VMT Analysis

TECHNICAL MEMORANDUM

To: Sergio Gutierrez, City of Long Beach
From: Carla Dietrich, Michael Baker International
CC: Frances Yau, Michael Baker International
Date: April 29, 2021
Subject: Cal Water Well and Water Treatment Plant VMT Assessment

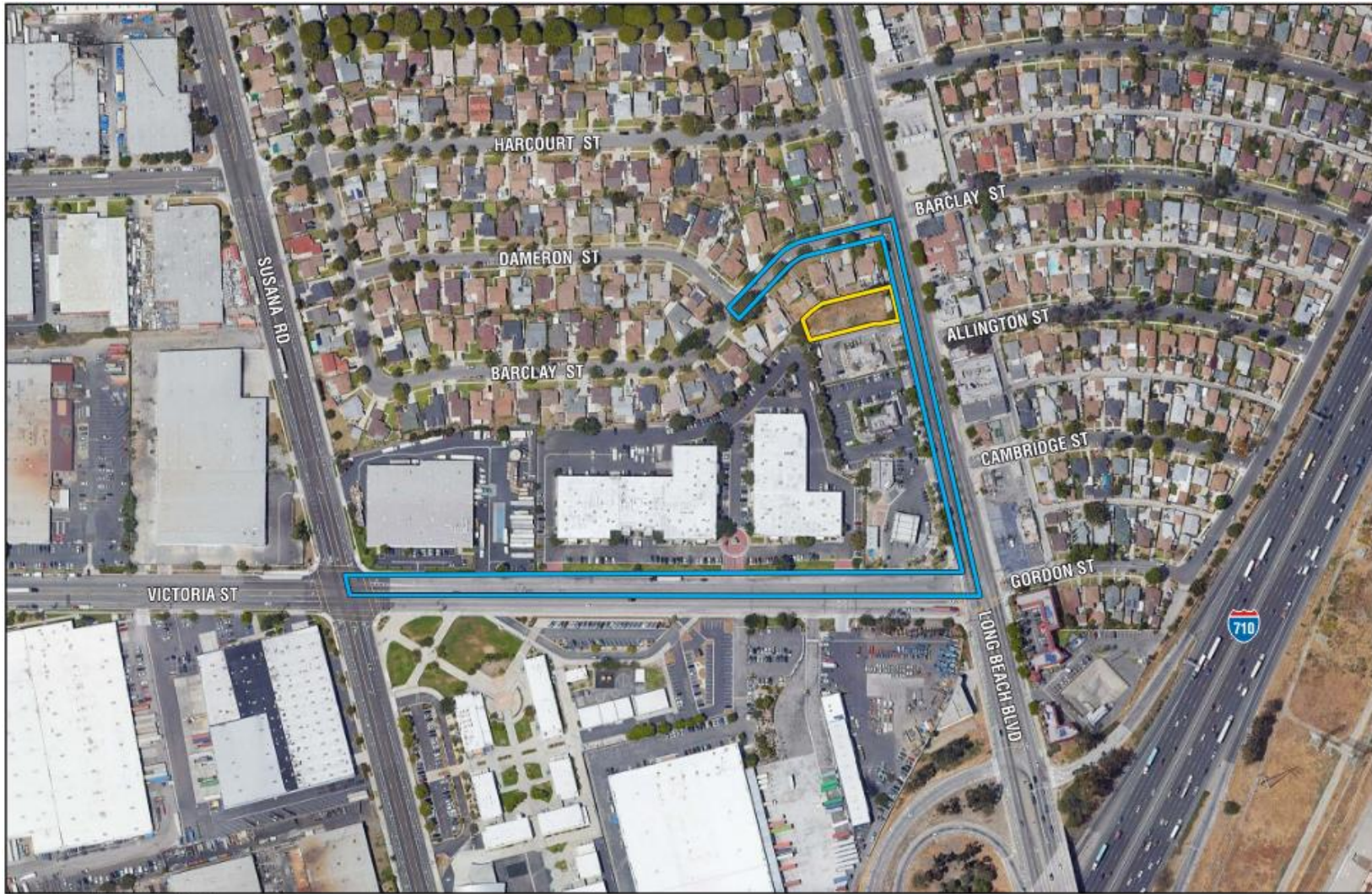
Introduction

The purpose of this memorandum is to document a Vehicle Miles Traveled (VMT) assessment for the proposed Cal Water Well and Water Treatment Plant (Project) located in the City of Long Beach, California in support of the Transportation component of the California Environmental Quality Act (CEQA) process. **Table 1** provides key project information. **Exhibit 1** shows the location of the Project and **Exhibit 2** shows the conceptual site plan.

Table 1: Project Information

Item	Description
Project Title	Cal Water Well and Water Treatment Plant
Project Location	6157 Long Beach Boulevard, City of Long Beach; Assessor’s Parcel Number [APN] 7307-008-053
Existing Use	Currently vacant and undeveloped.
Site Area	The Project site consists of a total of 16,268 square feet.
Surrounding Land Use	Residential and commercial uses to the north, Long Beach Boulevard to the east, commercial uses to the south, and industrial uses to the west.
Proposed Project	The Project proposes to construct a water well (known as DOM 301) and a water treatment plant on the Project site. Conveyance pipelines would also be constructed in the Long Beach Boulevard, Victoria Street, and Barclay Street rights-of-way to link two adjacent existing water wells, DOM 272 and DOM 297, to the proposed treatment plant.
Transportation Network Improvements	No capacity-adding roadway network improvements are assumed to be part of the Project including roadway widening and/or new connections.
Site Access	Site access would be provided via two gated 20-foot wide driveway access points along the southern project boundary.
Projected Activity Level	The site would be visited approximately once per day by a Cal Water inspector; no permanent employees would work on-site. A minimum of one to two parking spaces would be provided for Cal Water employees.

Exhibit 1: Project Location



Source: Google Earth Pro, March 2021

NOT TO SCALE



Project Site

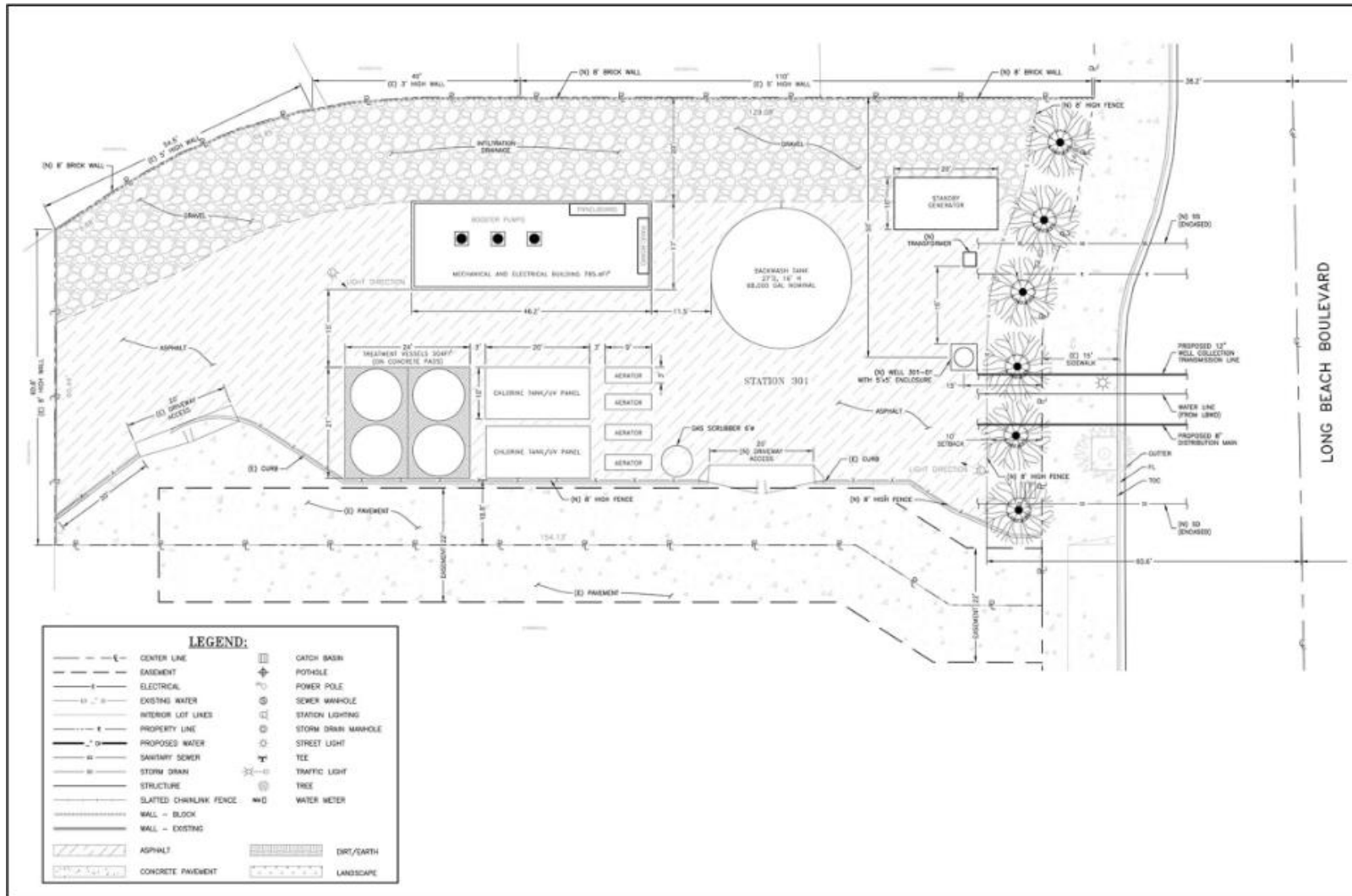
Proposed Pipeline Alignment

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CAL WATER WELL AND WATER TREATMENT PLANT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Site Vicinity

Exhibit 2: Proposed Site Plan



LEGEND:

—+—	CENTER LINE	▭	CATCH BASIN
---	EASEMENT	⊕	POTHOLE
---	ELECTRICAL	⊙	POWER POLE
---	EXISTING WATER	⊙	SEWER MANHOLE
---	INTERIOR LOT LINES	⊙	STATION LIGHTING
---	PROPERTY LINE	⊙	STORM DRAIN MANHOLE
---	PROPOSED WATER	⊙	STREET LIGHT
---	SANITARY SEWER	⊙	TIE
---	STORM DRAIN	⊙	TRAFFIC LIGHT
---	STRUCTURE	⊙	TREE
---	SLATED CHAINLINK FENCE	⊙	WATER METER
---	WALL - BLOCK	⊙	
---	WALL - EXISTING	⊙	
---	ASPHALT	⊙	
---	CONCRETE PAVEMENT	⊙	
---		⊙	DIRT/EARTH
---		⊙	LANDSCAPE

NOT TO SCALE

Michael Baker
INTERNATIONAL



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CAL WATER WELL AND WATER TREATMENT PLANT
INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Proposed Site Plan

Project Trip Generation

The estimated Project site trips were projected using trip generation rates obtained from the Institute of Transportation Engineers' (ITE) *Trip Generation Manual* (10th Edition) for land use code 170 (Utility). **Table 2** provides the trip generation rates which are based on the Project square footage. The Project development area square footage was obtained from the Proposed Site Plan and equals approximately 2,632 square feet as shown in **Table 3**. **Table 4** shows the trip generation calculations for the proposed Project. As shown, the project is anticipated to generate 35 daily trips, 6 AM Peak Hour trips, and 6 PM Peak Hour trips during an average weekday based on rates contained in the ITE *Trip Generation Manual*.

Table 2: Trip Generation Rates

Trip Generation Rates								
Land Use	ITE Code	Daily Trips Rate	AM Peak Hour			PM Peak Hour		
			Rate	In	Out	Rate	In	Out
Utility	170	13.24 / KSF	2.31	80%	20%	2.27	20%	80%

Note: KSF = Thousand Square Feet

Source: Institute of Transportation Engineers' (ITE) *Trip Generation Manual* (10th Edition)

Table 3: Site Developed Area Calculation

Developed Area	Square Footage
Mechanical and Electrical Building	785.4
Treatment Vessels	504
Chlorine Tank / UV Panel (1)	200
Chlorine Tank / UV Panel (2)	200
Aerator (1)	27
Aerator (2)	27
Aerator (3)	27
Aerator (4)	27
Gas Scrubber	28
Backwash Tank	573
Standby Generator	200
Transformer (Estimate)	9
Well	25
Total Development Area Square Footage	2,632.4

Source: Based on information obtained from the Project site plan (Figure 2).

Table 4: Project Trip Generation

Trip Generation (Number of Vehicles)									
Land Use	ITE Code	Intensity	Daily Trips	AM Peak Hour			PM Peak Hour		
				Volume	In	Out	Volume	In	Out
Utility	170	2.6324 KSF	35	6	5	1	6	1	5

Note: KSF = Thousand Square Feet

Analysis Guidelines

The primary resource for this assessment is the *City of Long Beach Traffic Impact Analysis Guidelines* (June 2020) (*City Guidelines*), specifically Section 2 of the document [*VMT Analysis to Satisfy SB 743 Requirements and CEQA Guidelines Section 15064.3, Subdivision (b)*].

Screening Criteria

Based on the *City Guidelines*, land use projects that meet any of the screening thresholds based on size, location, proximity to transit or trip-making potential identified in **Table 5** are presumed to result in a less-than-significant transportation impact under CEQA and do not require a detailed quantitative VMT assessment. **The Project meets the Screening Criteria for Small Projects, thus allowing for a determination of a less-than-significant impact on VMT. Therefore, a project-specific VMT calculation is NOT required.**

Table 5: Screening Assessment Summary

Category (City Guidelines Section)	Description	Assessment	Result
Small Projects (2.2.1)	The City of Long Beach has historically established a screening threshold of 50 peak-hour trips for requiring a TIA. For most land use types, approximately 10 percent of daily trips occur during the busiest peak hour. Therefore, a project generating fewer than 50 peak-hour trips would generate approximately 500 average daily trips (ADT). GHG emissions resulting from this level of vehicle traffic would be less than comparable GHG emissions thresholds. Therefore, this threshold of 500 ADT is being retained to screen small projects.	The project is projected to generate 35 project trips per day, well below the 500 daily trip-threshold.	Project Meets Criteria
Residential and Office Projects in Low-VMT Areas (2.2.2)	Maps showing VMT-efficient areas can be used to screen residential and office projects from further analysis	The Project does not include residential or office uses, thus this screening criteria does not apply.	Does Not Apply
Proximity to Transit Stations (2.2.3)	Generally, land use projects within one-half mile of either an existing major transit stop or an existing high quality transit corridor should be presumed to cause a less than significant transportation impact.	The anticipated users of the site are not likely to utilize transit as they may require the use of a work van or truck.	Does Not Apply
Other Land Uses (2.2.4)	Other types of land uses reviewed by the City would result in significant impacts related to VMT as follows: <ul style="list-style-type: none"> - Retail development that is 50,000 square feet or less. - Affordable residential development in areas with inadequate affordable housing. - Institutional/government and public service uses that support community health, safety, and welfare. - Uses within the Harbor District. 	The Project does not fall within any of the other land use categories as defined in the City Guidelines, therefore, this screening criteria does not apply.	Does Not Apply

Source: Category and Description obtained from the *City of Long Beach Traffic Impact Analysis Guidelines* (June 2020).

Project Level VMT Assessment & Mitigation Measures

Since the Project is presumed to have a less than significant impact, a project level VMT assessment and development of mitigation measures are not required.

Conclusions

The VMT evaluation of the Cal Water Well and Water Treatment Plant Project located in the City of Long Beach shows that the Project meets the screening criteria for Small Projects and thus a project- specific VMT assessment is not required. As such, **the Project is presumed to result in a less-than-significant impact on VMT.**