I-15 Express Lanes Project Southern Extension (ELPSE) ***NADR***

Noise Abatement Decision Report

I-15 Express Lanes Project Southern Extension

Riverside County, California
District 8

08-RIV-15-PM 20.3/40.1

EA 0J0820

June 2024

Prepared by:

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List of Abbreviated Terms

ADL	Aerially deposited lead
Benefited receptor	A dwelling unit or other equivalent land use expected to receive a noise reduction of at least 5 dBA from the proposed abatement measure
CA	California
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
City	City of Lake Elsinore
County	County of Riverside
dB	Decibels
dBA	A-weighted sound pressure level
ED	Environmental Document
EB	Eastbound
ES	Edge of shoulder
ETW	Edge of travel way
ft, ‘	Foot, feet
FHWA	Federal Highway Administration
GHG	Greenhouse emissions
HDM	Highway Design Manual
HOT	High occupancy toll lane
HOV	High occupancy vehicle
I-15	Interstate 15
Leq	Equivalent sound level (energy averaged sound level)
Leq[h]	A-weighted, energy average sound level during a 1-hour period
MGS	Metal guardrail system
NADR	Noise Abatement Decision Report
NAC	Noise abatement criteria
NB	Northbound
NEPA	National Environmental Policy Act

Noise reduction design goal	7 dBA of noise reduction at one or more benefited receptors
NSR	Noise Study Report
OC	Overcrossing
PDT	Project Development Team
PM	Post Mile
Protocol	Traffic analysis protocol
Reasonable allowance	The single dollar value - reasonable allowance per benefited receptor
Rd	Road
R/W, ROW	Right of Way
SR	State Route
TCE	Temporary construction easement
TeNS	Caltrans Technical Noise Supplement
VIA	Visual Impact Assessment
WB	Westbound

1. Introduction

The Noise Abatement Decision Report (NADR) presents the preliminary noise abatement decision for the Interstate 15 (I-15) Express Lanes Project Southern Extension (ELPSE) (Project), with basis on the guidance set forth in the California Department of Transportation (Caltrans) Traffic Noise Analysis Protocol (Protocol). This report has been approved by a California licensed professional civil engineer. The project level noise study report (NSR) prepared for this Project and concurred by Caltrans on May 20, 2024, is hereby incorporated by reference.

The Project consists of a single build alternative which proposes to construct two tolled express lanes in both the northbound and southbound directions for a total of four tolled express lanes within the median of I-15 between Post Miles (PM) 22.3 and 38.1, for a distance of approximately 15.8 miles. The Project would also widen up to 15 bridges, add segments of auxiliary lanes at certain locations, construct retaining walls, construct drainage systems, and install electronic toll collection equipment and signs.

1.1. Noise Abatement Assessment Requirements

Title 23, Code of Federal Regulations (CFR), Part 772 of the Federal Highway Administration (FHWA) standards (23 CFR 772) and Caltrans Traffic Noise Analysis Protocol (Protocol) define a Type I project as project that involves:

1. The construction of a highway on a new location or
2. The physical alteration of an existing highway where there is either:
    a. Substantial horizontal alteration. A project that halves the distance between the traffic noise source and the closest receptor between the existing condition to the future build condition, or
    b. Substantial vertical alteration. A project that removes shielding thereby exposing the line-of-sight between the receptor and the traffic noise source. This is done by altering either the vertical alignment of the highway or the topography between the highway traffic noise source and the receptor; or
3. The addition of a through-traffic lane(s). This includes the addition of a through-traffic lane that functions as a high-occupancy vehicle (HOV) lane, high-occupancy toll (HOT) lane, bus lane, or truck climbing lane; or
4. The addition of an auxiliary lane, except for when the auxiliary lane is a turn lane; or
5. The addition or relocation of interchange lanes or ramps added to a quadrant to complete an existing partial interchange; or

6. Restriping existing pavement for the purpose of adding a through-traffic lane or an auxiliary lane; or
7. The addition of a new or substantial alteration of a weigh station, rest stop, ride-share lot, or toll plaza.

Since the work proposed by this Project includes the addition of through-traffic lanes (toll lanes) and segments of auxiliary lanes, it is classified as a Type I Project and requires a detailed analysis to evaluate noise impacts and abatement measures to be considered.

23 CFR 772 and the Caltrans Protocol require that noise abatement be considered for projects that are predicted to result in traffic noise impacts. A traffic noise impact is considered to occur when future predicted design-year noise levels with the project "approach or exceed" Noise Abatement Criteria (NAC) defined in 23 CFR 772 or when the predicted design-year noise levels with the project substantially exceed existing noise levels. Per Caltrans definition, a predicted design-year noise level is considered to "approach" the NAC when it is within 1 dBA of the NAC, and a substantial increase is defined as being a 12-dBA increase above existing conditions.

23 CFR 772 requires that noise abatement measures that are reasonable and feasible and are likely to be incorporated into the project be identified before adoption of the final environmental document (ED).

The Protocol establishes a process for assessing the reasonableness and feasibility of noise abatement. Before publication of the draft ED, a *preliminary noise abatement decision* is made. The preliminary noise abatement decision is based on the *feasibility* of evaluated abatement and the *preliminary reasonableness determination.* Noise abatement is considered to be acoustically feasible if it is predicted to provide noise reduction of at least 5 dBA at an impacted receptor. Other nonacoustical factors relating to geometric standards (e.g., sight distances), safety, maintenance, and security can also affect feasibility.

The overall reasonableness of noise abatement is determined by the following three factors:

- The viewpoints of benefited receptors,
- The cost of noise abatement; and
- The noise reduction design goal.

The preliminary reasonableness determination reported in this document is based on the noise reduction design goal and the cost of abatement. The viewpoints of benefited receptors are determined by a survey that is normally conducted during the public review period of the Project's Environmental Document (ED).

Caltrans' noise reduction design goal is that a barrier must be predicted to provide at least 7 dBA of noise reduction at one or more benefited receptors. The cost reasonableness of abatement is determined by calculating a cost allowance that is considered to be a reasonable

amount of money to spend on abatement. This *reasonable allowance* is then compared to the engineer's cost estimate for the abatement. If the engineer's cost estimate is less than the allowance and the abatement will provide at least 7 dBA of noise reduction at one or more benefited receptors, then the preliminary determination is that the abatement is reasonable. If the cost estimate is higher than the allowance or if the design goal cannot be achieved, the preliminary determination is that abatement is not reasonable.

The NADR presents the preliminary noise abatement decision based on acoustical and nonacoustical feasibility factors, the design goal, and the relationship between noise abatement allowances and the engineer's cost estimate. The NADR does not present the final decision regarding noise abatement; rather, it presents key information on abatement to be considered throughout the environmental review process, based on the best available information at the time the draft ED is published. The final overall reasonableness decision will take this information into account, along with the results of the survey of benefited receptors conducted during the environmental review process. Other factors to be considered are:

- Feedback from impacted residents,
- Impacts of abatement construction,
- Physical limitations,
- Life cycle of abatement measures,
- Public and local agency input, and
- Social, economic, environmental, legal, and technological factors.

At the end of the public review process for the ED, the final noise abatement decision is made and is indicated in the final ED. The preliminary noise abatement decision will become the final noise abatement decision unless compelling information received during the environmental review process indicates that it should be changed.

1.2. Purpose of the Noise Abatement Decision Report

The purpose of the NADR is to:

- Summarize the conclusions of the NSR relating to acoustical feasibility, the design goal, and the reasonable allowances for abatement evaluated,
- Present the engineer's cost estimate for evaluated abatement,
- Present the engineer's evaluation of non-acoustical feasibility issues,
- Present the preliminary noise abatement decision, and
- Present preliminary information on secondary effects of abatement (impacts on cultural resources, scenic views, hazardous materials, biology, etc.).

The NADR does not address noise barriers or other noise-reducing treatments required as mitigation for significant adverse environmental effects identified under the California Environmental Quality Act (CEQA).

1.3. Project Description

The Riverside County Transportation Commission (RCTC), in cooperation with Caltrans, is proposing to construct tolled express lanes in both the northbound and southbound directions within the median through a portion of I-15 within Riverside County to improve and manage traffic operations, congestion, and travel times along the corridor; expand travel mode choice along the corridor; provide an option for travel time reliability; provide a cost-effective mobility solution; and expand and maintain compatibility with the express lane network in the region.

The primary component of the Project would be the construction of two tolled express lanes in both the northbound and southbound directions for a total of four tolled express lanes within the median of I-15 between PM 22.3 and 38.1, for a distance of approximately 15.8 miles. The Project would also add a southbound auxiliary lane for approximately 0.75 mile between both the Main Street Off-Ramp (PM 21.2) and State Route 74 (SR-74) On-Ramp, and for approximately 1 mile between the SR-74 (Central Avenue) Off-Ramp and Nichols Road On-Ramp (PM 23.9). The ELPSE lane improvements would be in Riverside County, California and would run through the City of Lake Elsinore, the unincorporated Riverside County community of Temescal Valley, and the City of Corona. Associated improvements for the toll lanes, including advance signage and transition striping, would extend approximately 2 miles from each end of the express lane limits to PM 20.3 in the south and PM 40.1 in the north. Along with the lane additions, the Project includes widening of up to 15 bridges, construction of retaining walls, construction of drainage systems, and installation of electronic toll collection equipment and signs. In addition, due to the southbound express lanes access between the Cajalco Road and Weirick Road interchanges, the southbound I-15 Weirick Road Off-Ramp would be configured as a dual lane exit. Figure 1-1 and Figure 1-2 show the regional vicinity and project location, respectively. The proposed lane additions and supporting infrastructure are expected to be constructed primarily within the existing State right of way (R/W).

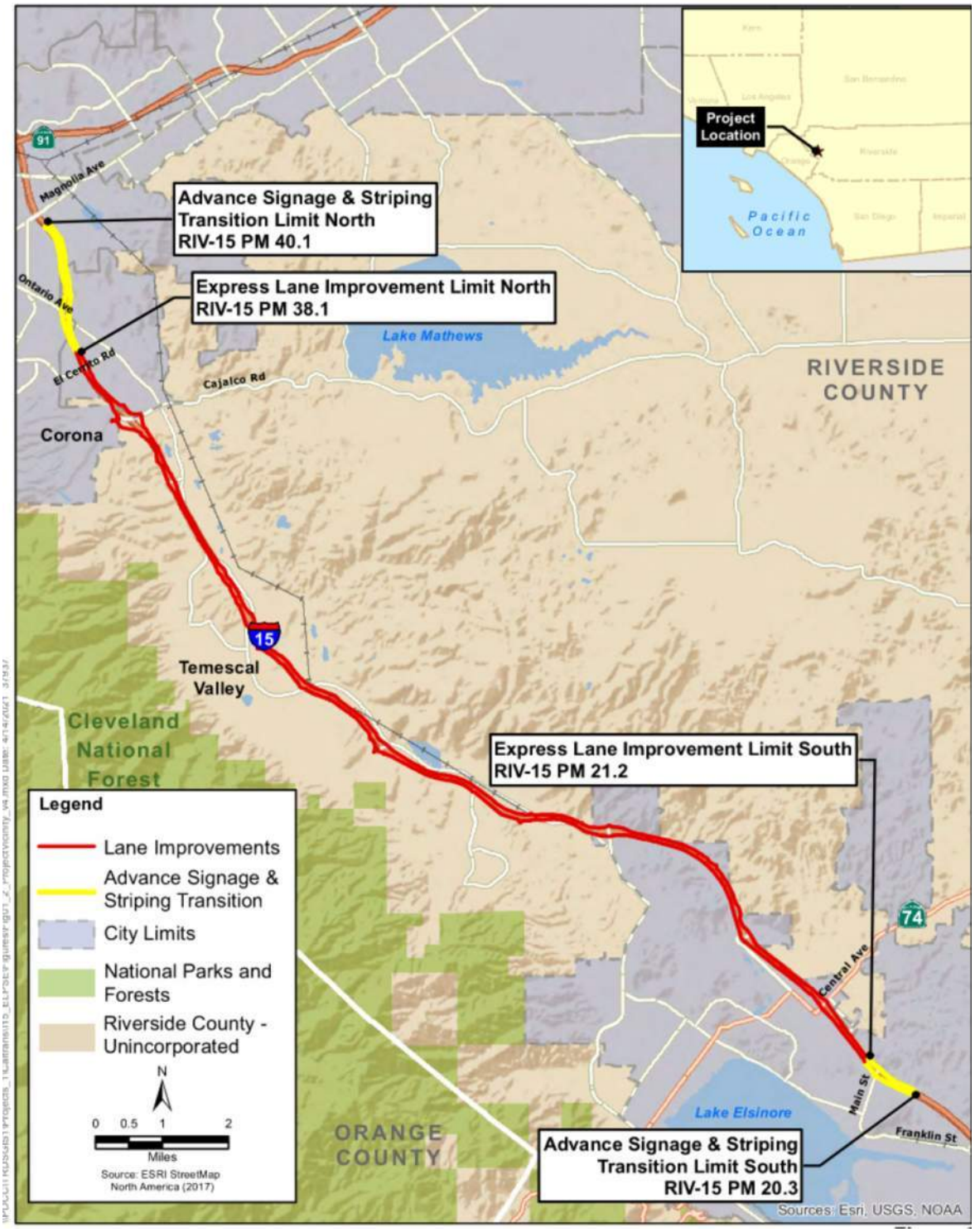
Land uses in the Project area consist primarily of a mix of single-family and multi-family residential, places of worship, a cemetery, medical facilities, a school, sports fields, playgrounds, restaurants, hotels, offices, retail, industrial, warehousing, utilities, and undeveloped lands.

This Project is included in the 2023 Federal Transportation Improvement Program (FTIP) as Project ID RIV170901. It is also included in SCAG's Connect SoCal 2020–2045 RTP/SCS as Project ID 3160001.

Figure 1-1 Regional Vicinity Map

Figure 1
Regional Vicinity
Interstate 15 Express Lanes Project Southern Extension (I-15 ELPSE)

Figure 1-2 Project Location Map



1.3.1 Project Alternatives

Build Alternative

The Build Alternative includes the addition of two tolled express lanes in both the northbound and southbound directions for a total of four tolled express lanes within the median of I-15 from SR-74 (Central Avenue) (PM 22.3) in the City of Lake Elsinore to El Cerrito Road (PM 38.1) in the City of Corona, for a distance of approximately 15.8 miles. The Project would be constructed primarily within the existing State R/W. Sign modifications and the installation of toll collection equipment and signs would also be included to support the new tolled express lanes. Advanced signage is required to be posted a minimum of 2 miles prior to the start of the tolled express lanes. Signage would be located within the project limits between PM 20.3 and PM 40.1. The Project includes widening of up to 15 bridges, construction of retaining walls, and construction of drainage systems. Due to the southbound express lanes access between the Cajalco Road Interchange and Weirick Road Interchange, the southbound I-15 Weirick Road Off-Ramp would be configured as a dual lane exit. The Build Alternative would not improve any other existing ramps and would not add any new connections.

No-Build Alternative

Under the No-Build Alternative, the I-15 ELPSE would not be constructed. The No-Build Alternative would not meet the purpose of the Project, as it would not improve existing and future traffic operations and mainline travel times, expand travel choice, increase travel time reliability, or expand the tolled express lane network. In addition, the No-Build Alternative would not address the existing and projected congestion and operational deficiencies within the project limits. Although the No-Build Alternative does not meet the Project's purpose and need, it would not preclude the construction of other future improvements or general maintenance activities.

1.4. Affected Land Uses

A field investigation was conducted to identify land uses that could be subject to traffic and construction noise impacts from the proposed Project. Table 1-1 summarizes the NAC corresponding to various land use categories.

A field investigation was conducted to identify land uses that could be subject to traffic and construction noise impacts from the proposed Project. Land uses in the Project area consist primarily of a mix of single-family and multi-family residential (Activity Category B); places of worship, a cemetery, medical facilities, a school, sports fields, and playgrounds (Activity Category C); restaurant/bar, hotels, and offices (Activity Category E); retail, industrial, warehousing, and utilities (Activity Category F); and undeveloped lands (Activity Category G).

Although all developed land uses are addressed under the Protocol, noise abatement is only considered for areas of frequent human use that would benefit from a lowered noise level. Accordingly, this impact analysis focuses on locations with defined outdoor activity areas, such as residential backyards of single-family homes and private or community outdoor use areas at multi-family residences (such as decks, balconies, and playgrounds) (Activity Category B); outdoor seating areas at a hospital, sports fields, and picnic areas (Activity Category C); places of worship (Activity Category C); and outdoor seating/dining areas and hotel swimming pools (Activity Category E). In addition, one place of worship was identified that did not have exterior noise-sensitive areas of frequent human use that were exposed to traffic noise; therefore, interior noise levels were considered at this location (Activity Category D). Generalized receptors were included for non-sensitive developed lands (Activity Category F) and undeveloped, unpermitted lands (Activity Category G) within the study area for reporting purposes only. Generalized receptors were typically placed within the property no closer than 100 feet from the edge of the outside traffic lane that best represents the highest expected traffic noise level.

The study area is divided into 20 separate noise analysis areas (NAAs) as outlined below. The following sections describe the land uses as they existed at the time of the NSR field noise measurements. Permitted developments that did not exist at the time of the measurements are included in the analysis but are described separately in Section 1.4.1. These are independent developments that are not part of the Project but for which a building permit has been issued by the local jurisdiction or the appropriate governing entity. These permitted developments would be constructed within the study area by third parties such as private developers or local public agencies.

NAA 1 – East side of I-15 between Main Street and SR-74 (Central Avenue)

The land uses in this NAA include large areas of undeveloped lands that are not permitted (Activity Category G); several restaurants, including one with outdoor seating (Activity

Category E); and industrial and retail facilities (Activity Category F). Most of NAA 1 is generally flat and below the elevation of I-15, but the southern end of the NAA contains hills that rise above the elevation of I-15. Three permitted projects are either completely or partially within NAA 1; these are the I-15 Main Street Interchange Project, the Ortega Grid Battery Energy Storage System, and the I-15/SR-74 Interchange Improvement Project (refer to Section 1.4.1 below for additional details).

NAA 2 – West side of I-15 between Main Street and SR-74 (Central Avenue)

The land uses in this NAA are a mix of residential (Activity Category B); offices and restaurants with outdoor seating (Activity Category E); retail, warehousing, and industrial buildings (Activity Category F); and undeveloped lands that are not permitted (Activity Category G). The area is generally flat with elevations at or below that of I-15. An existing sound wall at the mainline edge of shoulder provides shielding from I-15 at one cluster of residences. Four permitted projects are either completely or partially within NAA 2; these are the I-15 Main Street Interchange Project, the West Minthorn Street Industrial Building, the Central Plaza Project, and the I-15/SR Interchange Improvement Project (refer to Section 1.4.1 below for additional details).

NAA 3 – East side of I-15 between SR-74 (Central Avenue) and Nichols Road

The land uses in this NAA are primarily residential (Activity Category B). Other land uses include a place of worship, parks, and active sport areas at a high school (Activity Category C); interior place of worship (Activity Category D); a food court with outdoor seating and a restaurant (Activity Category E); retail and utilities (Activity Category F); and undeveloped lands that are not permitted (Activity Category G). The area is generally flat with elevations at or above that of I- 15. Several existing block walls on private property and one 14-foot-tall replacement sound wall within Caltrans ROW provide shielding from I-15 at the residences. Two permitted projects are either completely or partially within NAA 3; these are the I-15/SR-74 Interchange Improvement Project and the Nichols Ranch Specific Plan (refer to Section 1.4.1 below for additional details).

NAA 4 – West side of I-15 between SR-74 (Central Avenue) and Nichols Road

The land uses in this NAA include a cemetery (Activity Category C); developed lands with outdoor seating (Activity Category E); retail (Activity Category F); and undeveloped lands that are not permitted (Activity Category G). The area is generally flat with elevations below that of I-15. One permitted project is partially within NAA 4; this is the I-15/SR-74 Interchange Improvement Project (refer to Section 1.4.1 below for additional details).

NAA 5 – East side of I-15 between Nichols Road and Lake Street

The land uses in this NAA are primarily undeveloped lands that are not permitted (Activity Category G). Other land uses include agriculture and utility uses (Activity Category F). The

topography in this area is hilly and varies drastically, with elevations at or above that of I-15.

NAA 6 – West side of I-15 between Nichols Road and Lake Street

The land uses in this NAA are primarily undeveloped lands that are not permitted (Activity Category G). Other land uses include a utility use (Activity Category F). The topography in this area varies drastically, generally dropping toward Temescal Wash to the west, with elevations at or below that of I-15. One permitted project is in NAA 6; this is the Lake Street Storage Project (refer to Section 1.4.1 below for additional details).

NAA 7 – East side of I-15 between Lake Street and Indian Truck Trail

The land uses in this NAA are mixed and include offices (Activity Category E), industrial and utility uses (Activity Category F), and large areas of undeveloped lands that are not permitted (Activity Category G). The topography in this area varies from flat to hilly, with elevations ranging above to below that of I-15.

NAA 8 – West side of I-15 between Lake Street and Indian Truck Trail

The land uses in this NAA include residential (Activity Category B), developed lands with outdoor seating areas (Activity Category E), storage and retail facilities (Activity Category F), and undeveloped lands that are not permitted (Activity Category G). The topography in this area varies, with elevations ranging from above to below that of I-15. One permitted project is in NAA 8; this is the Ranch RV and Self-Storage project (refer to Section 1.4.1 below for additional details).

NAA 9 – East side of I-15 between Indian Truck Trail and Temescal Canyon Road (underpass)

The land uses in this NAA are primarily undeveloped lands that are not permitted (Activity Category G). Other land uses include restaurants (Activity Category E) and a gas station, parking lot, and retail facility (Activity Category F). The topography in this area is hilly and varies drastically, with elevations ranging from above to below that of I-15. One permitted project is in NAA 9; this is the Toscana Village Commercial Center project (refer to Section 1.4.1 below for additional details).

NAA 10 – West side of I-15 between Indian Truck Trail and Temescal Canyon Road (underpass)

The land uses in this NAA are primarily residential (Activity Category B). Other land uses include emergency services (Activity Category F) and undeveloped lands that are not permitted (Activity Category G). The topography in this area varies, with elevations ranging from above to below that of I-15. Several existing block walls on private property provide shielding from I-15 at the residences.

NAA 11 – East side of I-15 between Temescal Canyon Road (underpass) and Temescal Canyon Road

The land uses in this NAA are primarily undeveloped lands that are not permitted (Activity Category G). Other land uses include industrial (Activity Category F). The topography in this area varies, with elevations ranging from above to below that of I-15.

NAA 12 – West side of I-15 between Temescal Canyon Road (underpass) and Temescal Canyon Road

The land uses in this NAA include residential (Activity Category B), recreation areas (Activity Category C), outdoor seating areas (Activity Category E), retail facilities (Activity Category F), and undeveloped lands that are not permitted (Activity Category G). The topography in this area varies, with elevations at or above that of I-15. Several existing block walls on private property provide shielding from I-15 at the residences. One permitted project is in NAA 12; this is the Serrano Single-Family Home Community (refer to Section 1.4.1 below for additional details).

NAA 13 – East side of I-15 between Temescal Canyon Road and Weirick Road/Dos Lagos Drive

The majority of land uses in this NAA are residential (Activity Category B) and industrial/commercial (Activity Category F). Other land uses include a driving range (Activity Category C), outdoor seating areas (Activity Category E), and undeveloped lands that are not permitted (Activity Category G). The topography in this area varies, with elevations ranging from above to below that of I-15.

NAA 14 – West side of I-15 between Temescal Canyon Road and Weirick Road/Dos Lagos Drive

The land uses in this NAA are primarily residential (Activity Category B). Other land uses include parks (Activity Category C); outdoor seating areas (Activity Category E); industrial, storage, and warehousing (Activity Category F); and undeveloped lands that are not permitted (Activity Category G). The topography in this area varies, with elevations at or above that of I-15. Several existing block walls on private property provide shielding from I-15 at the residences.

NAA 15 – East side of I-15 between Weirick Road/Dos Lagos Drive and Cajalco Road

The land uses in this NAA are primarily residential (Activity Category B). Other land uses include a playground (Activity Category C); restaurants with outdoor dining and a hotel with outdoor use areas (Activity Category E); and undeveloped lands that are not permitted (Activity Category G). The topography in this area varies. Most of the NAA is flat and sits below the elevation of I-15, but a small area at the north end of the NAA is higher than I-15.

NAA 16 – West side of I-15 between Weirick Road/Dos Lagos Drive and Cajalco Road

The land uses in this NAA are primarily residential (Activity Category B). Other land uses include a place of worship (Activity Category C); a hotel with a pool and restaurants with outdoor dining (Activity Category E); retail facilities (Activity Category F); and undeveloped lands that are not permitted (Activity Category G). The topography in this area varies drastically, with elevations generally above that of I-15. One permitted project is in NAA 16; this is the Bedford Marketplace project (refer to Section 1.4.1 below for additional details).

NAA 17 – West side of I-15 between Cajalco Road and El Cerrito Road

The land uses in this NAA are primarily residential (Activity Category B). Other land uses include restaurants with outdoor dining (Activity Category E) and undeveloped lands that are not permitted (Activity Category G). The topography in this area varies, with elevations at or above that of I-15. The residences in this area are currently shielded from I-15 by an approximately 12- to 14-foot-tall existing noise barrier along the mainline edge of shoulder.

NAA 18 – East side of I-15 between Cajalco Road and El Cerrito Road

The land uses in this NAA include residential (Activity Category B). Other land uses include outdoor seating (Activity Category E) and retail facilities (Activity Category F). The topography in this area varies, with elevations at or below that of I-15. Two permitted projects are in NAA 18; these are the Woodsprings Hotel and the Latitude Business Park (refer to Section 1.4.1 below for additional details).

NAA 19 – West side of I-15 between El Cerrito Road and Ontario Avenue

The land uses in this NAA are primarily residential (Activity Category B). Other land uses include restaurants with outdoor use areas (Activity Category E) and retail (Activity Category F). The area is generally flat, with elevations at or above that of I-15. One permitted project is in NAA 19; this is the Foothill Center project (refer to Section 1.4.1 below for additional details).

NAA 20 – East side of I-15 between El Cerrito Road and Ontario Avenue

The land uses in this NAA are primarily active sport areas (Activity Category C). Other land uses include residential (Activity Category B). The area is generally flat and below the elevation of I-15. The residences in this area are currently shielded from I-15 by an approximately 14-foot-tall existing noise barrier along the mainline edge of shoulder.

1.4.1 Permitted Development

The Cities of Corona and Lake Elsinore and the County of Riverside were contacted to determine if any undeveloped parcels along the Project corridor have been permitted for future development. The Protocol states that development proposed on undeveloped land is considered permitted on the date of issuance of a building permit by the local jurisdiction or the appropriate governing entity. Land that is permitted for development is assigned to the appropriate activity category and analyzed in the same manner as other developed lands in that activity category for future year conditions. Several noise measurements were taken on land uses that have since been developed and are provided for informational purposes.

Information provided by the County and Cities indicates that there are 14 planned and permitted projects within City or County jurisdictions in the vicinity of the Project. These projects are independent of the improvements proposed under the Build Alternative analyzed in this NSR. Each project is discussed below. Where applicable, expenditure authorization (EA) numbers are provided.

I-15 Main Street Interchange Project (EA 1G7201)

The project, located in NAA 1 and NAA 2, includes the widening of Main Street through the interchange, new traffic signals at on-ramps and off-ramps on Main Street and at Camino del Norte, northbound and southbound I-15 ramp widening, and metering at on-ramps. This interchange project is currently under construction. Because this project proposes changes to the roadway layout, thus affecting traffic flow under future conditions, it has been included in the analysis of this report. However, the project is not noise sensitive and does not introduce any new receptors or land uses to the study area.

West Minthorn Street Industrial Building

This project, located in NAA 2, includes the construction of an approximately 30-foot-tall industrial building and parking lot partially enclosed by block walls, and is currently under construction. The project is northeast of the I-15 and Main Street interchange. There are no noise-sensitive land uses proposed as part of this project, which would be classified as Activity Category F. However, the project would provide shielding from traffic noise on I-15 at nearby noise-sensitive land uses. Therefore, this project has been included in the analysis of this report.

Ortega Grid Battery Energy Storage System

This project, located in NAA 1, includes the construction of a 20-megawatt Battery Energy Storage System east of I-15 and southeast of the intersection of Camino Del Norte and Ohana Circle. The project, which is currently under construction, consists of battery containers, switch gear, and a transformer, all enclosed within a security fence and block wall. There are no noisesensitive land uses proposed as part of this project, which would be classified as Activity Category F. The project would not affect any nearby noise-sensitive land uses, as it is

surrounded by commercial and industrial land uses and undeveloped lands. Nonetheless, this land use has been included for informational purposes.

Central Plaza Project

This project, located in NAA 2, includes the construction of 53,469 square feet of retail uses and 12,334 square feet of restaurant uses, including outdoor seating, south of Central Avenue and east of Collier Avenue. Much of this project was constructed at the time noise measurements were obtained for this analysis. The remaining restaurant use (Miguel's Jr.), with no outdoor dining, has since been built and included in the analysis of this report. Land uses within this project would be classified as Activity Categories E and F.

I-15/SR-74 (Central Avenue) Interchange Improvement Project (EA 0F310)

The City of Lake Elsinore, in cooperation with Caltrans, is proposing improvements to the I-15/SR-74 (Central Avenue) interchange, located in NAAs 1, 2, 3, and 4. The project proposes several improvements to improve traffic conditions, reduce congestion at the interchange, and help alleviate traffic surrounding local intersections within the project area. Three project alternatives are being evaluated as part of that project's NSR. However, only Alternative 3 is being modeled in this analysis (in both the No-Build and Build scenarios) because Alternative 3 has been selected as the Locally Preferred Alternative by the City of Lake Elsinore. A formal letter from the City of Lake Elsinore confirming that Alternative 3 is the Locally Preferred Alternative is included in Appendix D. Because this project proposes changes to the roadway layout, thus affecting geometry and traffic flow under future conditions, it has been included in the analysis of this report. However, the project is not noise sensitive and does not introduce any new receptors or land uses to the study area. The new northbound ramps proposed by this project require the removal of an existing sound wall in NAA 3 (within Caltrans ROW on the east side of I-15 near Dexter Avenue and 11th Street). As a result, the I-15/SR-74 (Central Avenue) project has committed to building a 14-foot-tall replacement wall that meets or exceeds the acoustical performance of the existing wall. Because this wall is included as a project feature it is assumed to exist in the future traffic noise modeling for the proposed Project.

Nichols Ranch Specific Plan

This project, located in NAA 3, proposes to construct 168 residential homes on approximately 31.1 acres along with developer block walls, recreational use areas, drainage basins, and open space, and is currently under construction. Because this project will introduce several noisesensitive land uses, it has been included in the analysis of this report. Land uses within this project would be classified as Activity Categories B and C.

Lake Street Storage Project

This project, located in NAA 6, includes an indoor recreational vehicle (RV) and boat storage facility of approximately 80,000 square feet, a 3,528-square-foot gas station/mini mart use, and outdoor RV storage spaces. The project, which is currently under construction, is southeast of the I-15 and Lake Street interchange. There are no noise-sensitive land uses proposed as part of this project and the project would not affect any nearby noise sensitive land uses, as it is surrounded by undeveloped lands. Nonetheless, this land use has been analyzed for informational purposes. Land uses within this project would be classified as Activity Category F.

Ranch RV and Self-Storage

This project, located in NAA 8, includes several storage buildings and an RV parking area on 7.03 acres of land. The project, which is currently under construction, is on the east side of Temescal Canyon Road, south of Hostettler Road. There are no noise-sensitive land uses proposed as part of this project; however, the project would provide shielding from traffic noise on I-15 at nearby noise-sensitive land uses. Therefore, this project has been included in the analysis of this report. Land uses within this project would be classified as Activity Category F.

Toscana Village Commercial Center

This project, located in NAA 9, includes the construction of several commercial buildings and changes to the existing roadway. The commercial uses include a gas station, restaurants, retail, office, and a supermarket. The project is northeast of the I-15 and Indian Truck Trail interchange. There are no noise-sensitive land uses proposed as part of this project. Nonetheless, this land use has been included for informational purposes. Land uses within this project would be classified as Activity Categories E and F.

Serrano Single-Family Home Community

This project, located in NAA 12, includes the construction of 80 two-story single-family homes, a recreation area, a dog park, and a trail node. The project, which is currently under construction, is north of the Temescal Canyon Road and Campbell Ranch Road intersection. Because this project proposes several noise-sensitive land uses and will change the acoustical shielding of existing homes behind the project, it has been included in the analysis of this report. Land uses within this project would be classified as Activity Categories B and C.

Bedford Marketplace

This project, located in NAA 16, includes the construction of a hotel, several restaurants, and general commercial uses. The project, which is currently under construction, is southwest of the I-15 and Cajalco Road interchange. Because this project proposes several noise-sensitive land uses that will be constructed prior to the completion of the proposed Project, it has been

included in the analysis of this report. Land uses within this project would be classified as Activity Categories E and F.

Woodsprings Hotel

This project, located in NAA 18, includes the construction of a 48,413-square-foot four-story hotel containing 122 rooms on 5.02 acres with no proposed outdoor use areas. The project, which is currently under construction, is northeast of the I-15 and Cajalco Road interchange. Because this project includes a noise-sensitive land use that will be constructed prior to the completion of the proposed Project, it has been included in the analysis of this report. Land uses within this project would be classified as Activity Category E.

Latitude Business Park

This project, located in NAA 18, includes the construction of 13 industrial buildings on 74.49 acres of land with multiple outdoor use areas. The project, which is currently under construction, is east of I-15, between the Cajalco Road and El Cerrito interchanges. Because this project includes several noise-sensitive land uses, it has been included in the analysis of this report. Land uses within this project would be classified as Activity Category E.

Foothill Center

This project, located in NAA 19, includes the construction of an 82,870-square-foot commercial center consisting of a service station, four restaurants with some outdoor seating areas, a 24,000-square-foot in-line tenant building, and a four-story 119-room hotel. The project, which is currently under construction, is northwest of the I-15 and El Cerrito interchange. Because this project includes several noise-sensitive land uses, it has been included in the analysis of this report. Land uses within this project would be classified as Activity Categories E and F.

2. Results of the Noise Study Report

The NSR for this roject was prepared by ICF and received concurrence from Caltrans District 8 on May 20, 2024.

The noise study was conducted to evaluate Project noise impacts and abatement under the requirements 23 CFR 772 at frequent human use areas within the limits of the proposed Project. The primary sources of noise include traffic movements along I-15 and on surface streets within the project area. The future highest hourly traffic noise impact at frequent outdoor human use areas along the project corridor was modeled for the No-Build and Build Alternative in order to determine appropriate abatement measures. The comparison to No-Build conditions indicates the direct effect of the Project.

When traffic noise impacts are identified, noise abatement measures must be considered. Traffic noise impacts result from one or more of the following occurrences: (1) an increase of 12 dBA or more over their corresponding existing noise levels, or (2) predicted noise levels approach or exceed the Noise Abatement Criteria (NAC). As part of the traffic noise study, 18 long-term (LT) and 130 short-term (ST) noise measurements were taken at representative land uses along the Project alignment.

A total of 130 representative sensitive receptors were modeled and evaluated for potential noise impacts resulting from the proposed Project. Modeled existing noise levels within the project area varied from 40 dBA to 77 dBA, and the modeled future noise levels for both the No-Build and Build conditions ranged from 40 dBA to 79 dBA at modeled land uses and along the Project alignment.

Modeling results indicate that predicted traffic noise levels for the design-year Build conditions at 70 modeled representative receptors would approach or exceed the applicable NAC for activity Category B, C, and E. Traffic noise impacts are therefore predicted to occur at these locations, resulting in the consideration of noise abatement measures.

According to 23 CFR 772(13)(c), Federal funding may be used for the following abatement measures:

- Construction of noise barriers, including the acquisition of property rights, either within or outside the highway right of way. Landscaping is not a viable noise abatement measure.
- Traffic management measures, including, but not limited to, traffic control devices and signage for the prohibition of certain vehicle types, time-use restrictions for certain vehicle types, modified speed limits, and exclusive lane designations.
- Alteration of horizontal and vertical alignments.

- Acquisition of real property, or interests therein (predominantly unimproved property), which would serve as a buffer zone to preempt development that would be adversely affected by traffic noise. This measure may be included in Type I projects only.
- Noise insulation for the Activity Category D facilities. Post-installation maintenance and operational costs for noise insulation are not eligible for Federal-aid funding.

However, the application of traffic management measures, such as restricting truck traffic, would be fundamentally counter to the project purpose and need. Further, the acquisition of land for creating buffer zones would not be practical, as the areas where such measures would be most effective are already used by residences and businesses. Noise barrier placement would be a practical form of noise abatement. The location of the noise barriers evaluated in the NSR are shown in Figure 5, sheets 1 through 40 included in Appendix A of this report, and the predicted future noise levels and noise barrier analysis details are included in Appendix B.

Noise barrier analyses were conducted for potential sound walls at various locations including the highway mainline shoulders, on- and off-ramp shoulders, R/W lines, on private property lines, and within private property. In addition to the analysis of individual noise barriers, analyses were conducted for various noise barrier systems that combined two or more non-contiguous barriers to investigate the possibility of improving the acoustical performance and maximizing the overall number of benefited receptors.

A total of 82 potential barrier locations were evaluated in the NSR. Each noise barrier was evaluated for feasibility based on achievable noise reduction of 5 dBA or more. The Caltrans' acoustical design goal is that a barrier must be predicted to provide at least 7 dBA of noise reduction at one benefited receptor. From the 82 barriers, 46 were found to be feasible to construct and meet the noise reduction goal goal of 7 dBA.

The NSR evaluated noise barriers ranging in height from 6 to 14 feet at the edge of shoulder, 6 to 20 feet at the R/W, and 6 to 16 feet at or within private property lines. In addition to the constant wall heights considered for each noise barrier, a "Design Barrier" whose segments had different heights was evaluated at many locations. This results in an optimized design that reduces construction costs by reducing the average height and overall square footage of the sound wall while still benefiting the same maximum number of receptors that would be possible with a taller constant-height wall. For instance, some receivers may experience 5 dBA of noise reduction from a 10-foot-high wall, while neighboring receivers may require a 14-foot-high wall to achieve the same noise reduction.

A maximum noise barrier height of 16 feet above the ground line is recommended to comply with Section 1102.3 of the Caltrans Highway Design Manual, which states that Noise barriers should not exceed 14 feet in height (measured from the pavement surface at the face of the

safety shape barrier) when located 15 feet or less from the edge of the traveled way, and should not exceed 16 feet in height above the ground when located more than 15 feet from the traveled way.

For each noise barrier found to be acoustically feasible, reasonable cost allowances were calculated by multiplying the number of benefited receptors by $146,000, which is the latest base cost allowance per benefited receptor established in September of 2023 per the Caltrans Noise and Vibration website, and is current as of the date of this report. For any noise barrier to be considered reasonable from a cost perspective the estimated cost of the noise barrier should be equal to or less than the total cost allowance calculated for the barrier.

Table 2-1 summarizes the locations (sorted by noise analysis area) of the 46 Design Barriers with variable heights that are acoustically feasible and achieve the 7 dBA noise reduction design goal, as well as the number of benefited receptors and the reasonable cost allowance. Barriers from noise analysis areas not included in this table were not accosutically feasible or did not meet the noise reduction design goal.

A separate table showing the 46 barriers evaluated at different constant heights with their corresponding number of benefited receptors and total reasonable allowance is included in Appendix D.

Table 2- 1 Summary of Acoustically Feasible Barriers from the NSR

Barrier ID (Length)	Location	I-15 Station	Height (ft)	Acoustically Feasible?	Number of Benefited Receptors	Design Goal Achieved?	Reasonable Allowance per Receptor	Total Reasonable Allowance
Noise Analysis Area 1								
SW1142B (725 ft)	R/W	1139+00 to 1146+25 Rt	10 to 20	Yes	2	Yes	$146,000	$292,000
Noise Analysis Area 2								
SW1109A (407 ft) + SW1109B (633 ft)	ES ES	1108+00 to 1112+00 Lt 1106+69 to 1113+00 Lt	12 & 6	Yes	1	Yes	$146,000	$146,000
SW1137B (213 ft)	Private Property	1139+50 to 1141+64 Lt	14 & 16	Yes	1	Yes	$146,000	$146,000
Noise Analysis Area 3								
SW1204 (240 ft)	Private Property	1202+50 to 1204+50 Rt	8	Yes	1	Yes	$146,000	$146,000
SW1208B (375 ft)	Private Property	1209+00 to 1211+00 Rt	10 & 12	Yes	2	Yes	$146,000	$292,000
SW1208D (1,094 ft)	R/W	1208+25 to 1219+00 Rt	14, 18, 20	Yes	2	Yes	$146,000	$292,000
SW1210 (135 ft)	Private Property	1209+50 to 1210+50 Rt	8 & 10	Yes	1	Yes	$146,000	$146,000
SW1212 (485 ft)	Private Property	1212+00 to 1215+35 Rt	12 & 14	Yes	3	Yes	$146,000	$438,000

Barrier ID (Length)	Location	I-15 Station	Height (ft)	Acoustically Feasible?	Number of Benefited Receptors	Design Goal Achieved?	Reasonable Allowance per Receptor	Total Reasonable Allowance
SW1214A (2,500 ft)	Between ES & R/W	1214+00 to 1239+00 Rt	12 & 14	Yes	10	Yes	$146,000	$1,460,000
SW1214B (2,123 ft)	Private Property	1214+27 to 1235+00 Rt	6 & 8	Yes	9	Yes	$146,000	$1,314,000
SW1214C (2,500 ft)	ES	1214+00 to 1239+00 Rt	10, 12, 14	Yes	10	Yes	$146,000	$1,460,000
SW1214D (2,266 ft)	R/W	1214+00 to 1238+75 Rt	12 to 20	Yes	9	Yes	$146,000	$1,314,000
SW1226A (2,850 ft)	ES	1210+50 to 1239+00 Rt	10, 12, 14	Yes	12	Yes	$146,000	$1,752,000
SW1226B (2,800 ft)	Between ES & R/W	1211+00 to 1239+00 Rt	12 & 14	Yes	12	Yes	$146,000	$1,752,000
SW1226C (2,831 ft)	R/W	1210+50 to 1238+75 Rt	18 & 20	Yes	11	Yes	$146,000	$1,606,000
SW1238 (291 ft)	Private Property	1236+00 to 1238+00 Rt	8 & 10	Yes	1	Yes	$146,000	$146,000
Noise Analysis Area 8								
SW1521C (385 ft)	Private Property	1519+75 to 1522+25 Lt	10, 12, 14, 16	Yes	1	Yes	$146,000	$146,000
Noise Analysis Area 12								
SW1691 (75 ft)	Private Property	1690+25 to 1690+75 Lt	6	Yes	1	Yes	$146,000	$146,000
SW1693 (150 ft)	Private Property	1691+75 to 1693+00 Lt	6	Yes	1	Yes	$146,000	$146,000
SW1751B (113 ft)	Private Property	1751+50 Lt	6 & 8	Yes	1	Yes	$146,000	$146,000
Noise Analysis Area 13								
SW1784B (304 ft)	Private Property	1780+00 to 1784+00 Rt	8	Yes	1	Yes	$146,000	$146,000
SW1872 (662 ft)	R/W	1869+44 to 1876+00 Rt	12, 14, 16	Yes	3	Yes	$146,000	$438,000
SW1874 (600 ft)	ES	1869+00 to 1875+00 Rt	6, 8, 10	Yes	2	Yes	$146,000	$292,000
SW1874 (700 ft) + SW1878 (525 ft)	ES ES	1869+00 to 1876+00 Rt 1873+75 to 1878+00 Rt	6, 8, 10	Yes	3	Yes	$146,000	$438,000
Noise Analysis Area 14								
SW1789 (164 ft)	Private Property	1788+00 to 1789+00 Lt	8	Yes	1	Yes	$146,000	$146,000
SW1823 (743 ft)	Private Property	1821+00 to 1828+00 Lt	6, 8, 12, 14	Yes	10	Yes	$146,000	$1,460,000
SW1831 (399 ft)	Private Property	1829+00 to 1832+00 Lt	8 & 10	Yes	3	Yes	$146,000	$438,000
SW1833 (205 ft)	Private Property	1832+00 to 1834+00 Lt	6 & 12	Yes	2	Yes	$146,000	$292,000
SW1839 (674 ft)	Private Property	1835+00 to 1841+00 Lt	6,10,12, 14, 16	Yes	7	Yes	$146,000	$1,022,000

Barrier ID (Length)	Location	I-15 Station	Height (ft)	Acoustically Feasible?	Number of Benefited Receptors	Design Goal Achieved?	Reasonable Allowance per Receptor	Total Reasonable Allowance
SW1875 (120 ft)	Private Property	1875+00 to 1875+75 Lt	6	Yes	1	Yes	$146,000	$146,000
Noise Analysis Area 15								
SW1890A (1,550 ft) + SW1890B (1,194 ft)	ES ES	1874+50 to 1890+00 Rt 1882+50 to 1894+25 Rt	6 to 14	Yes	65	Yes	$146,000	$9,949,000
SW1890A (1,600 ft) + SW1890C (1,388 ft)	ES R/W	1874+00 to 1890+00 Rt 1882+00 to 1895+78 Rt	10, 12, 14, 16	Yes	92	Yes	$146,000	$13,432,000
Noise Analysis Area 16								
SW1895 (63 ft)	Private Property	1894+75 to 1895+00 Lt	6	Yes	1	Yes	$146,000	$146,000
SW1899 (48 ft)	Private Property	1899+25 to 1899+75 Lt	6	Yes	1	Yes	$146,000	$146,000
SW1903 (1,194 ft)	R/W	1906+00 to 1918+00 Lt	10, 16, 18, 20	Yes	2	Yes	$146,000	$292,000
SW1905 (61 ft)	Private Property	1905+25 to 1905+75 Lt	6 & 8	Yes	1	Yes	$146,000	$146,000
SW1907 (78 ft)	Private Property	1906+00 to 1906+50 Lt	6 & 8	Yes	1	Yes	$146,000	$146,000
SW1911 (1,163 ft)	ES	1906+00 to 1918+00 Lt	10 & 14	Yes	1	Yes	$146,000	$146,000
SW1913 (172 ft)	Private Property	1910+75 to 1913+00 Lt	6 & 8	Yes	1	Yes	$146,000	$146,000
Noise Analysis Area 18								
SW1996A (585 ft) + SW1996B (1,438 ft)	ES ES	1990+00 to 1995+82 Rt 1982+00 to 1996+00 Rt	6, 10, 12, 14	Yes	14	Yes	$146,000	$2,044,000
SW1996B (1,511 ft)	ES	1981+00 to 1996+00 Rt	10, 12, 14	Yes	13	Yes	$146,000	$1,898,000
SW1996C (1,281 ft)	R/W	1983+00 to 1995+71 Rt	14, 16, 18	Yes	9	Yes	$146,000	$1,314,000
Noise Analysis Area 19								
SW2001 (255 ft) + SW2007A (637 ft)	ES ES	2002+00 to 2004+54 Lt 2005+00 to 2011+37 Lt	6, 8, 10	Yes	5	Yes	$146,000	$730,000
SW2007A (687 ft)	ES	2004+50 to 2011+37 Lt	8 & 10	Yes	5	Yes	$146,000	$730,000
SW2007B (592 ft)	R/W	2005+00 to 2011+00 Lt	14 & 18	Yes	5	Yes	$146,000	$730,000
SW2007C (638 ft)	Private Property	2005+50 to 2011+00 Lt	6, 8, 10	Yes	6	Yes	$146,000	$876,000

R/W = Right-of-way line ES = Edge of shoulder

3. Preliminary Noise Abatement Decision

3.1. Summary of Key Information

The preliminary noise abatement decision in this NADR is based on findings from the Project's NSR. The NSR identified 46 locations where noise barriers would be acoustically feasible by providing the minimum 5dBA reduction and would achieve the 7dBA noise reduction design goal as shown in the previous section. Noise barriers, in the form of masonry block sound walls, are proposed as abatement measures because they require less area than a noise berm or a combination berm/wall system.

The estimated construction cost for each noise barrier includes basic costs directly related and necessary for the construction of the noise abatement measure, and ancillary (indirect) costs. The basic costs include the following items: masonry block, structural concrete for pile foundations, pile caps, footings, reinforcing steel, and access gates when needed for maintenance or emergency access. Sound wall construction is based on the 2023 Edition of Caltrans' Standard Plans for masonry block construction. For this Project, the following types of masonry block sound walls have been considered:

- Masonry Block on Footing (Caltrans Standard Plan B15-1)
- Masonry Block on Pile Cap (Caltrans Standard Plan B15-3)
- Masonry Block on Type 836S Barrier (Caltrans Standard Plan B15-6)

A cost analysis for a 1,000 foot segment of sound wall was conducted (masonry block wall plus foundation items) to compare the basic costs per linear foot of each type of sound wall. The results show that:

- Sound walls on pile cap and on spread footing are the least expensive options, followed by the sound walls on Type 836S barrier. A sound wall on trench footing is the most expensive option due to the greater depth of footings, excavation and reinforced concrete required. For that reason, this option was not considered at any of the proposed sound wall locations.
- A sound wall on spread footing is the least expensive option for heights of 6 and 8 feet, and for heights equal or greater than 10 feet a sound wall on pile cap is more economical.

For sound walls proposed in private properties the pile cap or spread footing foundation types were considered to minimize construction costs. For sound walls proposed inside or along the Caltrans R/W limit line, pile cap footing is considered when the sound wall is located beyond the 30 foot clear recovery zone, and concrete barrier type 836S/SV is used when the sound wall is located inside the 30 foot clear recovery zone. For sound walls proposed inside the clear

recovery zone, the approaching side of the concrete barrier is protected with midwest guardrail system (MGS) and a terminal system end treatment.

Depending on the location, ancillary costs to build the sound walls may include but are not limited to removals, traffic control, pavement widening/reconstruction, drainage modifications, guard rail removal/installation, cost to retrofit bridge structures to support the noise barrier, reconstruction of sidewalks, utility relocations, landscaping replacement, damages to items inside private properties, erosion control, job site management, temporary and permanent easements, and right-of-way support. Other potential costs associated with the mitigation of secondary effects such as visual, hazardous materials, cultural or biological resources resulting from the construction of the noise abatement measure are not included in the cost estimate.

Caltrans unit cost data current at the time when this report was prepared was used to determine the preliminary cost estimate for each noise barrier. Likewise, the current allowance of $146,000 per benefited receptor was used to determine the total reasonable allowance of each barrier to then compare it against its estimated construction cost.

A three-step process was used to screen the 46 sound walls and determine which ones are cost reasonable. In the first step (1A) of basic cost screening, only the cost per square foot of masonry block was used to calculate the wall cost of each barrier, which was then compared to its reasonable allowance and 34 out of the 46 sound walls passed this step.

In the second step (1B) of basic cost screening, a foundation type was assigned to each of the 34 sound walls that passed the first step. The foundation type was selected depending on barrier location and site conditions, and its combined cost of wall plus foundation was compared to the reasonable allowance. In this step 19 out of the 34 sound walls passed for final cost analysis.

In the last step (2) of the screening process, a detailed cost estimate was developed for the 19 barriers that passed the second step to include the basic costs plus any ancillary costs required to construct each sound wall and was compared to the reasonable allowance. From this last step, two barrier locations consisting of combination/overlapping sound walls passed.

Appendix A includes the exhibits for locations of receptors and sound walls. Appendix C includes the summary tables of the three-step cost screening process for the Design Barriers, as well as the detailed cost estimate for each sound wall evaluated in the last step. Appendix D includes a summary table of the three-step cost screening process aplied to the 46 barriers evaluated at different constant heights, plus detailed cost estimates for the ones evaluated in the last step.

Table 3-1 provides a summary of information and comparison between the total reasonable allowance and the basic or detailed construction cost for the 46 Design Barriers previously

presented in Section 2 and sorted by noise analysis area, most of which are proposed with variable heights (stepped walls) to minimize the overall square footage and cost of the wall while benefiting the same maximum number of receptors that would be possible with a taller constant-height wall. The minimum barrier height needed to cut the line of sight from each receiver to the exhaust stacks of heavy trucks is also shown for information purposes. Depending on barrier location, maximum noise barrier heights are subject to compliance with Caltrans HDM or local agency design guidelines.

Table 3- 1 Summary of Abatement Key Information

Barrier ID (Length)	Height (ft)	Min. Height Needed [4] (ft)	Acoustically Feasible?	Number of Benefited Receptors	Design Goal Achieved?	Total Reasonable Allowance	Estimated Construction Cost	Cost Less than Allowance?
Noise Analysis Area 1								
SW1142B (725 ft)	10 to 20	18	Yes	2	Yes	$292,000	$595,848 [1]	No
Noise Analysis Area 2								
SW1109A (407 ft) + SW1109B (633 ft)	12 & 6	10	Yes	1	Yes	$146,000	$553,750 [1]	No
SW1137B (213 ft)	14 & 16	8	Yes	1	Yes	$146,000	$153,152 [1]	No
Noise Analysis Area 3								
SW1204 (240 ft)	8	8	Yes	1	Yes	$146,000	$180,509 [2]	No
SW1208B (375 ft)	10 & 12	6	Yes	2	Yes	$292,000	$329,121 [2]	No
SW1208D (1,094 ft)	14, 18, 20	20	Yes	2	Yes	$292,000	$938,955 [1]	No
SW1210 (135 ft)	8 & 10	6	Yes	1	Yes	$146,000	$208,000 [3]	No
SW1212 (485 ft)	12 & 14	6	Yes	3	Yes	$438,000	$530,620 [2]	No
SW1214A (2,500 ft)	12 & 14	Not Met	Yes	10	Yes	$1,460,000	$1,480,153 [1]	No
SW1214B (2,123 ft)	6 & 8	8	Yes	9	Yes	$1,314,000	$1,385,956 [2]	No
SW1214C (2,500 ft)	10, 12, 14	12	Yes	10	Yes	$1,460,000	$3,345,948 [2]	No
SW1214D (2,266 ft)	12 to 20	Not Met	Yes	9	Yes	$1,314,000	$1,991,944 [1]	No
SW1226A (2,850 ft)	10, 12, 14	12	Yes	12	Yes	$1,752,000	$4,125,948 [2]	No
SW1226B (2,800 ft)	12 & 14	Not Met	Yes	12	Yes	$1,752,000	$4,160,200 [2]	No
SW1226C (2,831 ft)	18 & 20	Not Met	Yes	11	Yes	$1,606,000	$2,416,633 [1]	No
SW1238 (291 ft)	8 & 10	6	Yes	1	Yes	$146,000	$232,093 [2]	No

Barrier ID (Length)	Height (ft)	Min. Height Needed [4] (ft)	Acoustically Feasible?	Number of Benefited Receptors	Design Goal Achieved?	Total Reasonable Allowance	Estimated Construction Cost	Cost Less than Allowance?
Noise Analysis Area 8								
SW1521C (385 ft)	10,12, 14, 16	8	Yes	1	Yes	$146,000	$234,009 [1]	No
Noise Analysis Area 12								
SW1691 (75 ft)	6	6	Yes	1	Yes	$146,000	$193,000 [3]	No
SW1693 (150 ft)	6	6	Yes	1	Yes	$146,000	$214,000 [3]	No
SW1751B (113 ft)	6 & 8	6	Yes	1	Yes	$146,000	$238,000 [3]	No
Noise Analysis Area 13								
SW1784B (304 ft)	8	10	Yes	1	Yes	$146,000	$227,088 [2]	No
SW1872 (662 ft)	12, 14, 16	18	Yes	3	Yes	$438,000	$440,812 [1]	No
SW1874 (600 ft)	6, 8, 10	14	Yes	2	Yes	$292,000	$731,016 [2]	No
SW1874 (700 ft) + SW1878 (525 ft)	6, 8, 10	14	Yes	3	Yes	$438,000	$546,058 [1]	No
Noise Analysis Area 14								
SW1789 (164 ft)	8	8	Yes	1	Yes	$146,000	$326,000 [3]	No
SW1823 (743 ft)	6, 8, 12, 14	6	Yes	10	Yes	$1,460,000	$1,797,000 [3]	No
SW1831 (399 ft)	8 & 10	12	Yes	3	Yes	$438,000	$615,000 [3]	No
SW1833 (205 ft)	6 & 12	12	Yes	2	Yes	$292,000	$559,000 [3]	No
SW1839 (674 ft)	6,10,12, 14, 16	14	Yes	7	Yes	$1,022,000	$1,320,000 [3]	No
SW1875 (120 ft)	6	6	Yes	1	Yes	$146,000	$279,000 [3]	No
Noise Analysis Area 15								
SW1890A (1,550 ft) + SW1890B (1,194 ft)	6 to 14	12	Yes	65	Yes	$9,949,000	$5,333,000 [3]	Yes
SW1890A (1,600 ft) + SW1890C (1,388 ft)	10, 12, 14, 16	12	Yes	92	Yes	$13,432,000	$5,234,000 [3]	Yes
Noise Analysis Area 16								
SW1895 (63 ft)	6	6	Yes	1	Yes	$146,000	$269,000 [3]	No
SW1899 (48 ft)	6	6	Yes	1	Yes	$146,000	$419,000 [3]	No
SW1903 (1,194 ft)	10, 16, 18, 20	Not Met	Yes	2	Yes	$292,000	$978,402 [1]	No

Barrier ID (Length)	Height (ft)	Min. Height Needed [4] (ft)	Acoustically Feasible?	Number of Benefited Receptors	Design Goal Achieved?	Total Reasonable Allowance	Estimated Construction Cost	Cost Less than Allowance?
SW1905 (61 ft)	6 & 8	6	Yes	1	Yes	$146,000	$295,000 [3]	No
SW1907 (78 ft)	6 & 8	6	Yes	1	Yes	$146,000	$350,000 [3]	No
SW1911 (1,163 ft)	10 & 14	Not Met	Yes	1	Yes	$146,000	$724,632 [1]	No
SW1913 (172 ft)	6 & 8	6	Yes	1	Yes	$146,000	$1,025,000 [3]	No
Noise Analysis Area 18								
SW1996A (585 ft) + SW1996B (1,438 ft)	6, 10, 12, 14	12	Yes	14	Yes	$2,044,000	$3,061,447 [2]	No
SW1996B (1,511 ft)	10, 12, 14	12	Yes	13	Yes	$1,898,000	$2,315,385 [2]	No
SW1996C (1,281 ft)	14, 16, 18	Not Met	Yes	9	Yes	$1,314,000	$1,708,386 [2]	No
Noise Analysis Area 19								
SW2001 (255 ft) + SW2007A (637 ft)	6, 8, 10	14	Yes	5	Yes	$730,000	$1,070,143 [2]	No
SW2007A (687 ft)	8 & 10	14	Yes	5	Yes	$730,000	$842,693 [2]	No
SW2007B (592 ft)	14 & 18	Not Met	Yes	5	Yes	$730,000	$1,010,532 [2]	No
SW2007C (638 ft)	6, 8, 10	8	Yes	6	Yes	$876,000	$1,477,000 [3]	No

Notes:

[1] = *Cost derived from step 1A of the basic cost screening which only included the cost of masonry wall. Additional items would be required to build this sound wall, which would result in a higher construction cost.*

[2] = *Cost derived from step 1B of the basic cost screening which only included the cost of masonry wall and its foundation. Additional items would be required to build this sound wall, which would result in a higher construction cost.*

[3] = *Cost derived from step 2 of the cost screening (detailed cost estimate). Other potential costs associated with mitigation of secondary effects such as visual, hazardous materials, cultural or biological resources resulting from the construction of the noise abatement measure are not included in the cost estimate.*

[4] = *Minimum height needed to break the line of sight between an 11.5 foot truck exhaust stack and the first row of benefited receptors. "Not Met" means barrier fails to block the line of sight.*

The following discussion provides a summary of the locations, site conditions, cost reasonableness, and some of the site constraints for the 46 barriers analyzed at different constant heights (Attachment D) as well as the proposed Design Barriers with variable heights presented in Table 3-1. The noise barriers or noise barrier systems that are cost reasonable are marked with an asterisk symbol * to facilitate their identification.

Noise Analysis Area 1

Noise Barrier SW1142B

Provides noise abatement for up to two benefited receptors and was evaluated along the R/W between northbound I-15 and Camino Del Norte, from station 1139+00 to 1146+25 with a total length of approximately 725 feet and modeled in 2-foot height increments from 6 to 20 feet. The barrier is conceptually proposed as a masonry block sound wall on Type 836S concrete barrier since it is located within the 30-foot clear recovery zone of the local road (Camino del Norte), on the east side of I-15 and in generally flat terrain, inside Caltrans R/W.

The barrier is acoustically feasible at heights of 14 to 20 feet, and achieves the 7 dBA noise reduction design goal at a barrier height of 20 feet. However, neither the barrier at a constant height of 20 feet nor the Design Barrier options were cost reasonable in the first step (1A) of the cost screening process because in either case the cost of masonry block alone exceeds the reasonable allowance for the benefited receptors.

Noise Analysis Area 2

Noise Barrier System SW1109A + SW1109B

Consists of two noise barriers in combination that provide noise abatement for one benefited receptor. SW1109A was evaluated along the southbound I-15 edge of shoulder, from station 1108+00 to 1112+00 with a total length of approximately 407 feet and modeled in 2-foot height increments from 6 to 14 feet. SW1109B was evaluated along the southbound I-15 Main Street Off-Ramp edge of shoulder, from station 1106+69 to 1113+00 with a total length of approximately 633 feet and modeled in 2-foot height increments from 6 to 14 feet.

Both barriers are conceptually proposed as masonry block sound walls on 836S concrete barriers because they are located within the 30 foot clear recovery zone. SW1109A is proposed on the outside of a horizontal curve of the I-15 freeway whose profile is ascending in the southbound direction. SW1109B is proposed in a straight segment of the ramp whose profile is descending towards the Main Street undercrossing. Both barriers are proposed inside Caltrans R/W.

This barrier system is acoustically feasible at heights of 8 to 14 feet, and achieves the 7 dBA noise reduction design goal at combined barrier heights of 12 to 14 feet. However, neither the barrier system at constant heights of 12 or 14 feet, nor the Design Barrier system options were cost reasonable in the first step (1A) of the cost screening process because in either case the cost of masonry block alone exceeds the reasonable allowance for the benefited receptor.

Noise Barrier SW1137B

Provides noise abatement for one benefited receptor and was evaluated on private property in place of an existing fence, approximately from station 1139+50 to 1141+64 with a length of approximately 213 feet and modeled in 2-foot height increments from 6 to 16 feet. The barrier is conceptually proposed as a masonry block sound wall on pile cap to minimize permanent easement requirements and impacts to the private property. This barrier is proposed along the back of the private property which is located in relatively flat terrain on the west side of I-15, just north of Wasson Canyon Wash in the City of Lake Elsinore.

The barrier is acoustically feasible at heights of 12 to 16 feet, and achieves the 7 dBA noise reduction design goal at a barrier height of 16 feet. However, neither the barrier at a constant height of 16 feet nor the Design Barrier options were cost reasonable in the first step (1A) of the cost screening process because in either case the cost of masonry block alone exceeds the reasonable allowance for the benefited receptors.

Noise Analysis Area 3

Noise Barrier SW1204

Provides noise abatement for one benefited receptor and was evaluated on private property in place of an existing fence, from station 1202+50 to 1204+50 with a total length of approximately 240 feet and modeled in 2-foot height increments from 6 to 14 feet. The barrier is conceptually proposed as a masonry block sound wall on pile cap to minimize permanent easement requirements and impacts to the private property. This barrier is proposed along the street-fronting sides of a private property located in unincorporated Riverside County at the corner of Dexter Avenue and 11th Street, on the east side of I-15 and in generally flat terrain.

The barrier is acoustically feasible and achieves the 7 dBA noise reduction design goal at barrier heights of 8 to 16 feet. However, this barrier at constant heights of 8 feet (same as Design Barrier) or more was not cost reasonable in the first step (1B) of the cost screening process because the cost of masonry block and pile cap foundation exceed the reasonable allowance for the benefited receptor.

Noise Barrier SW1208B

Provides noise abatement for up to two benefited receptors and was evaluated on private property in place of an existing block wall, from station 1209+00 to 1211+00 with a total length of approximately 375 feet and modeled in 2-foot height increments from 6 to 16 feet. The barrier is conceptually proposed as a masonry block sound wall on pile cap to minimize permanent easement requirements and impacts to the private property. This barrier is proposed

along the top of a fill slope at the back of the pads for private properties on the east side of I-15, in unincorporated Riverside County.

The barrier is acoustically feasible at heights of 8 to 16 feet, and achieves the 7 dBA noise reduction design goal at barrier heights of 12 to 16 feet. However, neither the barrier at constant heights of 12 to 16 feet nor the Design Barrier options were cost reasonable in the second step (1B) of the cost screening process because the cost of masonry block and pile cap foundation exceed the reasonable allowance for the benefited receptors.

Noise Barrier SW1208D

Provides noise abatement for up to two benefited receptors and was evaluated along the R/W between northbound I-15 and Dexter Avenue, from station 1208+25 to 1219+00 with a total length of approximately 1,094 feet and modeled in 2-foot height increments from 6 to 20 feet. The barrier is conceptually proposed as a masonry block sound wall on pile cap since it is located beyond the 30-foot clear recovery zone on the east side of I-15 and in irregular terrain, inside Caltrans R/W.

The barrier is acoustically feasible at heights of 12 to 20 feet, and achieves the 7 dBA noise reduction design goal at a barrier height of 20 feet. However, neither the barrier at a constant height of 20 feet nor the Design Barrier options were cost reasonable in the first step (1A) of the cost screening process because in either case the cost of masonry block alone exceeds the reasonable allowance for the benefited receptors.

Noise Barrier SW1210

Provides noise abatement for one benefited receptor and was evaluated on private property in place of an existing fence, from station 1209+50 to 1210+50 with a total length of approximately 135 feet and modeled in 2-foot height increments from 6 to 16 feet. The barrier is conceptually proposed as a masonry block sound wall on pile cap to minimize permanent easement requirements and impacts to the private property. This barrier is proposed along the front side of a private property located on the east side of Dexter Avenue north of 11th Street in unincorporated Riverside County, on the east side of I-15 and in generally flat terrain.

The barrier is acoustically feasible at a barrier heights of 6 to 16 feet and achieves the 7 dBA noise reduction design goal at barrier heights of 10 to 16 feet. However, neither the barrier at constant heights of 10 to 16 feet nor the Design Barrier options were cost reasonable in the last step (2) of the cost screening process because the cost of masonry block, pile cap foundation, and other ancillary costs exceed the reasonable allowance for the benefited receptor.

Noise Barrier SW1212

Provides noise abatement for up to three benefited receptors and was evaluated on private property in place of an existing block wall, from station 1212+00 to 1215+35 with a total length of approximately 485 feet and modeled in 2-foot height increments from 6 to 16 feet. The barrier is conceptually proposed as a masonry block sound wall on pile cap to minimize permanent easement requirements and impacts to the private property. This barrier is proposed along the top of a fill slope at the back of the pads for private properties on the east side of I-15, in unincorporated Riverside County.

The barrier is acoustically feasible at heights of 6 to 16 feet, and achieves the 7 dBA noise reduction design goal at barrier heights of 12 to 16 feet. However, neither the barrier at constant heights of 12 to 16 feet nor the Design Barrier options were cost reasonable in the second step (1B) of the cost screening process because the cost of masonry block and pile cap foundation exceed the reasonable allowance for the benefited receptors.

Noise Barrier SW1214A

Provides noise abatement for up to ten benefited receptors and was evaluated along the northbound I-15 edge of shoulder, from station 1214+00 to 1239+00 with a total length of approximately 2,500 feet and modeled in 2-foot height increments from 6 to 20 feet. The barrier is conceptually proposed as a masonry block sound wall on Type 836S concrete barrier since it is located within the 30-foot clear recovery zone on the east side of I-15, in unincorporated Riverside County, inside Caltrans R/W.

The barrier is acoustically feasible at heights of 10 to 14 feet, and achieves the 7 dBA noise reduction design goal at barrier heights of 12 to 14 feet. However, neither the barrier at constant heights of 12 or 14 feet, nor the Design Barrier options were cost reasonable in the first step (1A) of the cost screening process because in either case the cost of masonry block alone exceeds the reasonable allowance for the benefited receptors.

Noise Barrier SW1214B

Provides noise abatement for up to nine benefited receptors and was evaluated at an alternative location on Temescal Valley High School private property in place of an existing fence, from station 1214+27 to 1235+00 with a total length of approximately 2,123 feet and modeled in 2-foot height increments from 6 to 16 feet. The barrier is conceptually proposed as a masonry block sound wall on pile cap to minimize permanent easement requirements and impacts to the private property. This barrier is proposed along the top of a fill slope for the school sport fields located adjacent to Caltrans R/W on the east side of I-15, in unincorporated Riverside County.

The barrier is acoustically feasible and achieves the 7 dBA noise reduction design goal at barrier heights of 6 to 16 feet. However, neither the barrier at constant heights of 6 to 16 feet nor the Design Barrier options were cost reasonable in the second step (1B) of the cost screening process because the cost of masonry block and pile cap foundation exceed the reasonable allowance for the benefited receptors.

Noise Barrier SW1214C

Provides noise abatement for up to ten benefited receptors and was evaluated along the northbound I-15 edge of shoulder, from station 1214+00 to 1239+00 with a total length of approximately 2,500 feet and modeled in 2-foot height increments from 6 to 14 feet. The barrier is conceptually proposed as a masonry block sound wall on Type 836S concrete barrier since it is located within the 30-foot clear recovery zone on the east side of I-15, in unincorporated Riverside County, inside Caltrans R/W.

The barrier is acoustically feasible at heights of 8 to 14 feet, and achieves the 7 dBA noise reduction design goal at barrier heights of 10 to 14 feet. However, neither the barrier at constant heights of 10 to 14 feet nor the Design Barrier options were cost reasonable in the second step (1B) of the cost screening process because the cost of masonry block and pile cap foundation exceed the reasonable allowance for the benefited receptors.

Noise Barrier SW1214D

Provides noise abatement for up to nine benefited receptors and was evaluated along the R/W between northbound I-15 and Dexter Avenue, from station 1214+00 to 1238+75 with a total length of approximately 2,266 feet and modeled in 2-foot height increments from 6 to 20 feet. The barrier is conceptually proposed as a masonry block sound wall on pile cap since it is located beyond the 30-foot clear recovery zone on the east side of I-15 and in irregular terrain, inside Caltrans R/W.

The barrier is acoustically feasible at heights of 10 to 20 feet, and achieves the 7 dBA noise reduction design goal at barrier heights of 12 to 20 feet. However, neither the barrier at constant heights of 12 to 20 feet, nor the Design Barrier options were cost reasonable in the first step (1A) of the cost screening process because in either case the cost of masonry block alone exceeds the reasonable allowance for the benefited receptors.

Noise Barrier SW1226A

Provides noise abatement for up to twelve benefited receptors and was evaluated along the northbound I-15 edge of shoulder, from station 1210+50 to 1239+00 with a total length of approximately 2,850 feet and modeled in 2-foot height increments from 6 to 20 feet. The

barrier is conceptually proposed as a masonry block sound wall on Type 836S concrete barrier since it is located within the 30-foot clear recovery zone on the east side of I-15, in unincorporated Riverside County, inside Caltrans R/W.

The barrier is acoustically feasible at heights of 8 to 14 feet, and achieves the 7 dBA noise reduction design goal at barrier heights of 10 to 14 feet. However, neither the barrier at constant heights of 10 to 14 feet nor the Design Barrier options were cost reasonable in the second step (1B) of the cost screening process because the cost of masonry block and concrete barrier foundation exceed the reasonable allowance for the benefited receptors.

Noise Barrier SW1226B

Provides noise abatement for up to twelve benefited receptors and was evaluated at an alternative location along the northbound I-15 edge of shoulder, from station 1211+00 to 1239+00 with a total length of approximately 2,800 feet and modeled in 2-foot height increments from 6 to 14 feet. The barrier is conceptually proposed as a masonry block sound wall on Type 836S concrete barrier since it is located within the 30-foot clear recovery zone on the east side of I-15, in unincorporated Riverside County, inside Caltrans R/W.

The barrier is acoustically feasible at heights of 10 to 14 feet, and achieves the 7 dBA noise reduction design goal at barrier heights of 12 to 14 feet. However, neither the barrier at constant heights of 12 to 14 feet nor the Design Barrier options were cost reasonable in the second step (1B) of the cost screening process because the cost of masonry block and concrete barrier foundation exceed the reasonable allowance for the benefited receptors.

Noise Barrier SW1226C

Provides noise abatement for up to eleven benefited receptors and was evaluated along the R/W between northbound I-15 and Dexter Avenue, from station 1210+50 to 1238+75 with a total length of approximately 2,831 feet and modeled in 2-foot height increments from 6 to 20 feet. The barrier is conceptually proposed as a masonry block sound wall on pile cap since it is located beyond the 30-foot clear recovery zone on the east side of I-15 and in irregular terrain, inside Caltrans R/W.

The barrier is acoustically feasible at heights of 10 to 20 feet, and achieves the 7 dBA noise reduction design goal at barrier heights of 12 to 20 feet. However, neither the barrier at constant heights of 12 to 20 feet, nor the Design Barrier options were cost reasonable in the first step (1A) of the cost screening process because in either case the cost of masonry block alone exceeds the reasonable allowance for the benefited receptors.

Noise Barrier SW1238

Provides noise abatement for one benefited receptor and was evaluated on private property in place of a fence being built as part of the Nichols Ranch Specific Plan, from station 1236+00 to 1238+00 with a total length of approximately 291 feet and modeled in 2-foot height increments from 6 to 16 feet. The barrier is conceptually proposed as a masonry block sound wall on spread footing case 2 since it would be along the top of a fill slope in an open area (park). This barrier is located on the east side of I-15 in unincorporated Riverside County.

The barrier is acoustically feasible at a barrier heights of 6 to 16 feet and achieves the 7 dBA noise reduction design goal at barrier heights of 10 to 16 feet. However, neither the barrier at constant heights of 10 to 16 feet nor the Design Barrier options were cost reasonable in the second step (1B) of the cost screening process because the cost of masonry block and spread footing foundation exceed the reasonable allowance for the benefited receptor.

Noise Analysis Area 8

Noise Barrier SW1521C

Provides noise abatement for one benefited receptor and was evaluated on private property in place of an existing fence being, from station 1522+25 to 1519+75 with a total length of approximately 385 feet and modeled in 2-foot height increments from 6 to 16 feet. The barrier is conceptually proposed as a split (two segment) masonry block sound wall on pile cap to minimize permanent easement requirements and impacts to the private property. This barrier wraps around the private property sides fronting Horsethief Canyon Road and the I-15 freeway, and it is located on the west side of I-15, in unincorporated Riverside County.

The barrier is acoustically feasible at a barrier heights of 10 to 16 feet and achieves the 7 dBA noise reduction design goal at a barrier height of 16 feet. However, neither the barrier at constant height of 16 feet nor the Design Barrier options were cost reasonable in the first step (1A) of the cost screening process because in either case the cost of masonry block alone exceeds the reasonable allowance for the benefited receptor.

Noise Analysis Area 12

Noise Barrier SW1691

Provides noise abatement for one benefited receptor and was evaluated on private property near the edge of a retaining structure being built as part of the Serrano Single-Family Home Community, from station 1690+25 to 1690+75 with a total length of approximately 75 feet and modeled in 2-foot height increments from 6 to 16 feet. The barrier is conceptually proposed as a masonry block sound wall on pile cap to minimize permanent easement requirements and

impacts to the private property. This barrier wraps around a flat open area along the top of a fill slope, and it is located on the west side of I-15 north of Temescal Canyon Road, in unincorporated Riverside County.

The barrier is acoustically feasible and achieves the 7 dBA noise reduction design goal at barrier heights of 6 to 16 feet. However, this barrier at constant heights of 6 feet (same as Design Barrier) or more was not cost reasonable in the last step (2) of the cost screening process because the cost of masonry block, pile cap foundation, and other ancillary costs exceed the reasonable allowance for the benefited receptor.

Noise Barrier SW1693

Provides noise abatement for one benefited receptor and was evaluated on private property in place of a fence being built as part of the Serrano Single-Family Home Community, from station 1693+00 to 1691+75 with a total length of approximately 150 feet and modeled in 2-foot height increments from 6 to 16 feet. The barrier is conceptually proposed as a masonry block sound wall on pile cap to minimize permanent easement requirements and impacts to the private property. This barrier wraps around the side facing the freeway of flat open area (park) that has a retaining wall structure, and it is located on the west side of I-15 north of Temescal Canyon Road, in unincorporated Riverside County.

The barrier is acoustically feasible and achieves the 7 dBA noise reduction design goal at barrier heights of 6 to 16 feet. However, this barrier at constant heights of 6 feet (same as Design Barrier) or more was not cost reasonable in the last step (2) of the cost screening process because the cost of masonry block, pile cap foundation, and other ancillary costs exceed the reasonable allowance for the benefited receptor.

Noise Barrier SW1751B

Provides noise abatement for one benefited receptor and was evaluated on private property in place of an existing fence located along the perimeter of the outdoor playground area of a Carl's Jr. restaurant, near station 1751+50 with a total length of approximately 113 feet and modeled in 2-foot height increments from 6 to 16 feet. The barrier is conceptually proposed as a masonry block sound wall on pile cap to minimize permanent easement requirements, impacts to the private property, and to the drive through adjacent to the playground. This barrier is located on the west side of I-15 south of Temescal Canyon Road, in unincorporated Riverside County.

The barrier is acoustically feasible at barrier heights of 6 to 16 feet and achieves the 7 dBA noise reduction design goal at barrier heights of 8 to 16 feet. However, neither the barrier at constant heights of 8 to 16 feet nor the Design Barrier options were cost reasonable in the last

step (2) of the cost screening process because the cost of masonry block, pile cap foundation, and other ancillary costs exceed the reasonable allowance for the benefited receptor.

Noise Analysis Area 13

Noise Barrier SW1784B

Provides noise abatement for one benefited receptor and was evaluated on private property in place of an existing fence, from station 1780+00 to 1784+00 with a total length of approximately 304 feet and modeled in 2-foot height increments from 6 to 16 feet. The barrier is conceptually proposed as a masonry block sound wall on spread footing case 1 since it is in an open outdoor area (driving range). This barrier is located on the east side of Temescal Canyon Road north of Dawson Canyon Road, in unincorporated Riverside County.

The barrier is acoustically feasible and achieves the 7 dBA noise reduction design goal at barrier heights of 8 to 16 feet. However, this barrier at constant heights of 8 feet (same as Design Barrier) or more was not cost reasonable in the second step (1B) of the cost screening process because the cost of masonry block and spread footing foundation exceed the reasonable allowance for the benefited receptor.

Noise Barrier SW1872

Provides noise abatement for up to three benefited receptors and was evaluated along the R/W between northbound I-15 and Temescal Canyon Road, from station 1869+44 to 1876+00 with a total length of approximately 662 feet and modeled in 2-foot height increments from 6 to 18 feet. The barrier is conceptually proposed as a masonry block sound wall on pile cap to minimize permanent easement requirements and potential impacts to adjacent private properties. This barrier is located along the bottom of the existing fill slope of the I-15 northbound Weirick Road/Dos Lagos Drive Off-Ramp, inside Caltrans R/W.

The barrier is acoustically feasible at barrier heights of 12 to 18 feet and achieves the 7 dBA noise reduction design goal at barrier heights of 14 to 18 feet. However, neither the barrier at constant heights of 14 or 18 feet, nor the Design Barrier options were cost reasonable in the first step (1A) of the cost screening process because in either case the cost of masonry block alone exceeds the reasonable allowance for the benefited receptor.

Noise Barrier SW1874

Provides noise abatement for up to two benefited receptors and was evaluated along the edge of shoulder of the Weirick Road/Dos Lagos Drive NB Off-Ramp, from station 1869+00 to 1875+00 with a total length of approximately 600 feet and modeled in 2-foot height increments

from 6 to 14 feet. The barrier is conceptually proposed as a masonry block sound wall on Type 836S concrete barrier since it is located within the 30-foot clear recovery zone.

The barrier is acoustically feasible at barrier heights of 6 to 14 feet and achieves the 7 dBA noise reduction design goal at barrier heights of 10 to 14 feet. However, neither the barrier at constant heights of 10 to 14 feet nor the Design Barrier options were cost reasonable in the second step (1B) of the cost screening process because the cost of masonry block and concrete barrier foundation exceed the reasonable allowance for the benefited receptors.

Noise Barrier System SW1874 + SW1878

Consists of two noise barriers in combination that provide noise abatement for up to three benefited receptors. SW1874 was evaluated along the northbound I-15 Weirick Road/Dos Lagos Drive Off-Ramp edge of shoulder, from station 1869+00 to 1876+00 with a total length of approximately 700 feet and modeled in 2-foot height increments from 6 to 14 feet. SW1878 was evaluated along the northbound I-15 edge of shoulder, from station 1873+75 to 1878+00 with a total length of approximately 525 feet and modeled in 2-foot height increments from 6 to 14 feet. Both barriers are conceptually proposed as masonry block sound walls on 836S concrete barriers because they are located within the 30 foot clear recovery zone. The barriers are located on straight segments of the mainline and ramp, inside Caltrans R/W.

This barrier system is acoustically feasible at heights of 6 to 14 feet, and achieves the 7 dBA noise reduction design goal at combined barrier heights of 8 to 14 feet. However, neither the barrier system at constant heights of 8 or 14 feet, nor the Design Barrier system options were cost reasonable in the first step (1A) of the cost screening process because in either case the cost of masonry block alone exceeds the reasonable allowance for the benefited receptors.

Noise Analysis Area 14

Noise Barrier SW1789

Provides noise abatement for one benefited receptor and was evaluated on private property in place of an existing residential fence line and a block wall, from station 1788+00 to 1789+00 with a total length of approximately 164 feet and modeled in 2-foot height increments from 6 to 16 feet. The barrier is conceptually proposed as a masonry block sound wall on pile cap to minimize permanent easement requirements and impacts to the private property. This barrier wraps around the property along the top of a fill slope, and it is located on the west side of I-15, in unincorporated Riverside County.

The barrier is acoustically feasible and achieves the 7 dBA noise reduction design goal at barrier heights of 8 to 16 feet. However, this barrier at constant heights of 8 feet (same as Design Barrier) or more was not cost reasonable in the last step (2) of the cost screening process

because the cost of masonry block, pile cap foundation, and other ancillary costs exceed the reasonable allowance for the benefited receptor.

Noise Barrier SW1823

Provides noise abatement for up to ten benefited receptors and was evaluated on private property in place of an existing residential block wall, from station 1821+00 to 1828+00 with a total length of approximately 743 feet and modeled in 2-foot height increments from 6 to 16 feet. The barrier is conceptually proposed as a masonry block sound wall on pile cap to minimize permanent easement requirements and impacts to the private properties. This barrier is located at the back of the private properties on the west side of Knabe Road along the top of a landscaped fill slope, on the west side of I-15, in unincorporated Riverside County.

The barrier is acoustically feasible at barrier heights of 10 to 16 feet and achieves the 7 dBA noise reduction design goal at barrier heights of 14 to 16 feet. However, neither the barrier at constant heights of 14 to 16 feet nor the Design Barrier options were cost reasonable in the last step (2) of the cost screening process because the cost of masonry block, pile cap foundation, and other ancillary costs exceed the reasonable allowance for the benefited receptors.

Noise Barrier SW1831

Provides noise abatement for up to three benefited receptors and was evaluated on private property (community park) in place of an existing fence, from station 1829+00 to 1832+00 with a total length of approximately 399 feet and modeled in 2-foot height increments from 6 to 16 feet. The barrier is conceptually proposed as a masonry block sound wall on pile cap to minimize permanent easement requirements and impacts to the private properties. This barrier is proposed along the top of a landscaped fill slope and wraps around the side of the park fronting Knabe Road on the west side of I-15, in unincorporated Riverside County.

The barrier is acoustically feasible at barrier heights of 8 to 16 feet and achieves the 7 dBA noise reduction design goal at barrier heights of 10 to 16 feet. However, neither the barrier at constant heights of 10 to 16 feet nor the Design Barrier options were cost reasonable in the last step (2) of the cost screening process because the cost of masonry block, pile cap foundation, and other ancillary costs exceed the reasonable allowance for the benefited receptors.

Noise Barrier SW1833

Provides noise abatement for up to two benefited receptors and was evaluated on private property in place of an existing residential block wall, from station 1832+00 to 1834+00 with a total length of approximately 205 feet and modeled in 2-foot height increments from 6 to 16 feet. The barrier is conceptually proposed as a masonry block sound wall on pile cap to

minimize permanent easement requirements and impacts to the private properties. This barrier is located along the side of the private properties next to Knabe Road, partially along the top of a landscaped fill slope, on the west side of I-15 in unincorporated Riverside County.

The barrier is acoustically feasible at barrier heights of 10 to 16 feet and achieves the 7 dBA noise reduction design goal at barrier heights of 12 to 16 feet. However, neither the barrier at constant heights of 12 to 16 feet nor the Design Barrier options were cost reasonable in the last step (2) of the cost screening process because the cost of masonry block, pile cap foundation, and other ancillary costs exceed the reasonable allowance for the benefited receptors.

Noise Barrier SW1839

Provides noise abatement for up to seven benefited receptors and was evaluated on private property in place of an existing residential block wall, from station 1835+00 to 1841+00 with a total length of approximately 674 feet and modeled in 2-foot height increments from 6 to 16 feet. The barrier is conceptually proposed as a masonry block sound wall on pile cap to minimize permanent easement requirements and impacts to the private properties. This barrier is located along the back of the private properties next to Knabe Road, partially along the top of a landscaped fill slope, on the west side of I-15 in unincorporated Riverside County.

The barrier is acoustically feasible at barrier heights of 10 to 16 feet and achieves the 7 dBA noise reduction design goal at barrier heights of 12 to 16 feet. However, neither the barrier at constant heights of 12 to 16 feet nor the Design Barrier options were cost reasonable in the last step (2) of the cost screening process because the cost of masonry block, pile cap foundation, and other ancillary costs exceed the reasonable allowance for the benefited receptors.

Noise Barrier SW1875

Provides noise abatement for one benefited receptor and was evaluated on private property in place of an existing fence on an outdoor patio area of a medical building facility, from station 1875+00 to 1875+75 with a total length of approximately 120 feet and modeled in 2-foot height increments from 6 to 16 feet. The barrier is conceptually proposed as a masonry block sound wall on pile cap to minimize permanent easement requirements from the private property and assuming the barrier can be built along the perimeter of an existing retaining wall structure. If the retaining wall has ground ties/anchors that prevent the construction of the noise barrier's pile cap foundation, reconstruction of the retaining wall may be required to build the sound wall on top. This additional cost has not been included in the cost analysis for this barrier. This barrier is located on the side of the private property fronting Knabe Road on the west side of I-15, in unincorporated Riverside County.

The barrier is acoustically feasible and achieves the 7 dBA noise reduction design goal at barrier heights of 6 to 16 feet. However, this barrier at constant heights of 6 feet (same as Design Barrier) or more was not cost reasonable in the last step (2) of the cost screening process because the cost of masonry block, pile cap foundation, and other ancillary costs exceed the reasonable allowance for the benefited receptor.

Noise Analysis Area 15

* Noise Barrier System SW1890A + SW1890B

Consists of two noise barriers in combination that provide noise abatement for up to sixty five benefited receptors at the Terrano Apartments located on the north-east quadrant of the I-15 and Weirick Road/Dos Lagos Drive interchange. SW1890A was evaluated along the northbound I-15 edge of shoulder, including a segment along the outside edge of the existing bridge structure at the Weirick Road undercrossing, from station 1874+50 to 1890+00 with a total length of approximately 1,550 feet and modeled in 2-foot height increments from 6 to 14 feet. SW1890B was evaluated along the northbound I-15 Weirick Road On-Ramp edge of shoulder, from station 1882+50 to 1894+25 with a total length of approximately 1,194 feet and modeled in 2-foot height increments from 6 to 14 feet. Both barriers are conceptually proposed as masonry block sound walls on 836S concrete barriers because they are located within the 30 foot clear recovery zone. The barriers are located on straight segments of the mainline and ramp, inside Caltrans R/W.

This barrier system is acoustically feasible at heights of 10 to 14 feet, and achieves the 7 dBA noise reduction design goal at combined barrier heights of 12 to 14 feet. In the last step (2) of the cost screening process, the total construction cost for this barrier system at constant heights of 12 and 14 feet, as well as the Design Barrier system option were less than the allowance for the benefited receptors, and therefore either option is cost reasonable.

A barrier system with a constant height of 14 feet at both barriers benefits the same number of receptors as the Design Barrier consisting of segments with variable heights between 6 and 14 feet, but the constant height barrier system costs more. Therefore the Design Barrier is a better option to consider.

* Noise Barrier System SW1890A + SW1890C

Consists of two noise barriers in combination that provide noise abatement for up to ninety two benefited receptors at the Terrano Apartments located on the north-east quadrant of the I-15 and Weirick Road/Dos Lagos Drive interchange. SW1890A was evaluated along the northbound I-15 edge of shoulder, including a segment along the outside edge of the existing bridge structure at the Weirick Road undercrossing, from station 1874+00 to 1890+00 with a

total length of approximately 1,600 feet and modeled in 2-foot height increments from 6 to 14 feet. SW1890C was evaluated along the R/W east of the northbound I-15 Weirick Road On-Ramp, from station 1882+00 to 1895+78 with a total length of approximately 1,388 feet and modeled in 2-foot height increments from 6 to 20 feet. Barrier SW1890A is conceptually proposed as masonry block sound wall on 836S concrete barrier because it is located within the 30 foot clear recovery zone. Barrier SW1890C is conceptually proposed as masonry block sound wall on 836S concrete barriers for its segments located within the 30 foot clear recovery zone, and on pile cap for segments beyond the clear recovery zone. The barriers are located on straight segments of the mainline and ramp, inside Caltrans R/W.

This barrier system is acoustically feasible at heights of 8 to 14 feet for SW1890A and 8 to 20 feet for SW1890C, and achieves the 7 dBA noise reduction design goal at barrier heights of 12 to 14 feet for SW1890A and 12 to 20 feet for SW1890C. In the last step (2) of the cost screening process, the total construction cost for this barrier system at constant heights of 12 to 20 feet, as well as the Design Barrier system option were less than the allowance for the benefited receptors, and therefore both options are cost reasonable.

The barrier system with maximum constant heights of 14 for SW1890A and 20 feet for SW1890C benefits up to 109 receptors, but costs more to construct than the Design Barrier and it exceeds the recommended maximum height of 16 feet per Caltrans HDM design guidelines. Therefore the Design Barrier is a better option to consider.

Noise Analysis Area 16

Noise Barrier SW1895

Provides noise abatement for one benefited receptor and was evaluated on private property along the edge of an outdoor area with swimming pool, from station 1894+75 to 1895+00 with a total length of approximately 63 feet and modeled in 2-foot height increments from 6 to 16 feet. The barrier is conceptually proposed as a masonry block sound wall on pile cap to minimize permanent easement requirements and impacts to the private property located on top of a hill adjacent to the freeway, on the north west quadrant of the I-15/Weirick Road interchange in unincorporated Riverside County. The barrier is proposed to wrap around the side of the property facing the freeway.

The barrier is acoustically feasible and achieves the 7 dBA noise reduction design goal at barrier heights of 6 to 16 feet. However, this barrier at constant heights of 6 feet (same as Design Barrier) or more was not cost reasonable in the last step (2) of the cost screening process because the cost of masonry block, pile cap foundation, and other ancillary costs exceed the reasonable allowance for the benefited receptor.

Noise Barrier SW1899

Provides noise abatement for one benefited receptor and was evaluated on private property in place of an existing fence located on top of a retaining wall, from station 1899+25 to 1899+75 with a total length of approximately 48 feet and modeled in 2-foot height increments from 6 to 16 feet. The barrier is conceptually proposed as a masonry block sound wall on pile cap to minimize permanent easement requirements and impacts to the private property located on top of a hill adjacent to the freeway, on the north west quadrant of the I-15/Weirick Road interchange in unincorporated Riverside County. The barrier is proposed to wrap around the side of the property facing the freeway.

The barrier is acoustically feasible and achieves the 7 dBA noise reduction design goal at barrier heights of 6 to 16 feet. However, this barrier at constant heights of 6 feet (same as Design Barrier) or more was not cost reasonable in the last step (2) of the cost screening process because the cost of masonry block, pile cap foundation, and other ancillary costs exceed the reasonable allowance for the benefited receptor.

Noise Barrier SW1903

Provides noise abatement for up to two benefited receptors and was evaluated along the R/W west of southbound I-15, from station 1906+00 to 1918+00 with a total length of approximately 1,194 feet and modeled in 2-foot height increments from 6 to 20 feet. The barrier is conceptually proposed as a masonry block sound wall on pile cap since it is located beyond the 30 foot clear recovery zone. This barrier location is on the inside of a horizontal curve of the segment of I-15 between the southbound Cajalco Road On-Ramp and the Weirick Road Off-Ramp, inside Caltrans R/W.

The barrier is acoustically feasible at barrier heights of 16 to 20 feet and achieves the 7 dBA noise reduction design goal at a barrier height of 20 feet. However, neither the barrier at a constant height of 20 feet nor the Design Barrier options were cost reasonable in the first step (1A) of the cost screening process because in either case the cost of masonry block alone exceeds the reasonable allowance for the benefited receptors.

Noise Barrier SW1905

Provides noise abatement for one benefited receptor and was evaluated on private property on top of an existing retaining wall, from station 1905+25 to 1905+75 with a total length of approximately 61 feet and modeled in 2-foot height increments from 6 to 16 feet. The barrier is conceptually proposed as a masonry block sound wall on pile cap to minimize permanent easement requirements and impacts to the private property located in the hills adjacent to the west side of the freeway, between Bedford Wash and Weirick Road in unincorporated

Riverside County. The barrier is proposed to wrap around the side of the property facing the freeway.

The barrier is acoustically feasible and achieves the 7 dBA noise reduction design goal at barrier heights of 8 to 16 feet. However, neither the barrier at constant heights of 8 feet or more nor the Design Barrier options were cost reasonable in the last step (2) of the cost screening process because the cost of masonry block, pile cap foundation, and other ancillary costs exceed the reasonable allowance for the benefited receptor.

Noise Barrier SW1907

Provides noise abatement for one benefited receptor and was evaluated on private property in place of an existing fence and pilasters, from station 1906+00 to 1906+50 with a total length of approximately 78 feet and modeled in 2-foot height increments from 6 to 16 feet. The barrier is conceptually proposed as a masonry block sound wall on pile cap to minimize permanent easement requirements and impacts to the private property located in the hills adjacent to the west side of the freeway, between Bedford Wash and Weirick Road in unincorporated Riverside County. The barrier is proposed to wrap around the side of the property facing the freeway, which is heavily landscaped with trees, bushes, and plants.

The barrier is acoustically feasible at barrier heights of 6 to 16 feet and achieves the 7 dBA noise reduction design goal at barrier heights of 8 to 16 feet. However, neither the barrier at constant heights of 8 to 16 feet nor the Design Barrier options were cost reasonable in the last step (2) of the cost screening process because the cost of masonry block, pile cap foundation, and other ancillary costs exceed the reasonable allowance for the benefited receptor.

Noise Barrier SW1911

Provides noise abatement for one benefited receptor and was evaluated along the southbound I-15 edge of shoulder, from station 1906+00 to 1918+00 with a total length of approximately 1,163 feet and modeled in 2-foot height increments from 6 to 14 feet. The barrier is conceptually proposed as a masonry block sound wall on Type 836S concrete barrier since it is located within the 30 foot clear recovery zone. This barrier location is on the inside of a horizontal curve of the segment of I-15 between the southbound Cajalco Road On-Ramp and the Weirick Road Off-Ramp, inside Caltrans R/W.

The barrier is acoustically feasible at barrier heights of 12 to 14 feet and achieves the 7 dBA noise reduction design goal at a barrier height of 14 feet. However, neither the barrier at a constant height of 14 feet nor the Design Barrier options were cost reasonable in the first step (1A) of the cost screening process because in either case the cost of masonry block alone exceeds the reasonable allowance for the benefited receptor.

Noise Barrier SW1913

Provides noise abatement for one benefited receptor and was evaluated on private property in place of a fence located on top of an existing retaining wall, from station 1910+75 to 1913+00 with a total length of approximately 172 feet and modeled in 2-foot height increments from 6 to 16 feet. The barrier is conceptually proposed as a masonry block sound wall on pile cap to minimize permanent easement requirements and impacts to the private property located on top of one of the hills adjacent to the west side of the freeway, between Bedford Wash and Weirick Road in unincorporated Riverside County. The barrier is proposed to wrap around the side of the property facing the freeway.

The barrier is acoustically feasible at barrier heights of 6 to 16 feet and achieves the 7 dBA noise reduction design goal at barrier heights of 8 to 16 feet. However, neither the barrier at constant heights of 8 to 16 feet nor the Design Barrier options were cost reasonable in the last step (2) of the cost screening process because the cost of masonry block, pile cap foundation, and other ancillary costs exceed the reasonable allowance for the benefited receptor.

Noise Analysis Area 18

Noise Barrier System SW1996A + SW1996B

Consists of two noise barriers in combination that provide noise abatement for up to fourteen benefited receptors. SW1996A was evaluated along the northbound I-15 edge of shoulder, from station 1990+00 to 1995+82 with a total length of approximately 585 feet and modeled in 2-foot height increments from 6 to 14 feet. SW1996B was evaluated along the northbound I-15 El Cerrito Road Off-Ramp edge of shoulder, from station 1982+00 to 1996+00 with a total length of approximately 1,438 feet and modeled in 2-foot height increments from 6 to 14 feet. Both barriers are conceptually proposed as masonry block sound walls on 836S concrete barriers because they are located within the 30 foot clear recovery zone. The barriers are located on the inside of horizontal curve segments of the mainline and ramp, inside Caltrans R/W.

This barrier system is acoustically feasible at heights of 6 to 14 feet, and achieves the 7 dBA noise reduction design goal at combined barrier heights of 8 to 14 feet. However, neither the barrier system at constant heights of 8 or 14 feet, nor the Design Barrier system options were cost reasonable in the second step (1B) of the cost screening process because the cost of masonry block and concrete barrier foundation exceed the reasonable allowance for the benefited receptors.

Noise Barrier SW1996B

Provides noise abatement for up to thirteen benefited receptors and was evaluated along the northbound I-15 El Cerrito Road Off-Ramp edge of shoulder, from station 1981+00 to 1996+00 with a total length of approximately 1,511 feet and modeled in 2-foot height increments from 6 to 14 feet. The barrier is conceptually proposed as a masonry block sound wall on Type 836S concrete barrier since it is located within the 30 foot clear recovery zone. This barrier is located on the inside of a horizontal curve of the ramp, inside Caltrans R/W.

The barrier is acoustically feasible at barrier heights of 6 to 14 feet and achieves the 7 dBA noise reduction design goal at barrier heights of 12 to 14 feet. However, neither the barrier at constant heights of 12 to 14 feet nor the Design Barrier options were cost reasonable in the second step (1B) of the cost screening process because the cost of masonry block and concrete barrier foundation exceed the reasonable allowance for the benefited receptors.

Noise Barrier SW1996C

Provides noise abatement for up to nine benefited receptors and was evaluated along the R/W east of the northbound I-15 El Cerrito Road Off-Ramp, from station 1983+00 to 1995+71 with a total length of approximately 1,281 feet and modeled in 2-foot height increments from 6 to 20 feet. The barrier is conceptually proposed as a masonry block sound wall on pile cap to minimize permanent easement requirements and potential impacts to adjacent private properties. This barrier is located along the bottom of the existing fill slope of the ramp, inside Caltrans R/W.

The barrier is acoustically feasible at barrier heights of 12 to 20 feet and achieves the 7 dBA noise reduction design goal at barrier heights of 16 to 20 feet. However, neither the barrier at constant heights of 16 to 20 feet nor the Design Barrier options were cost reasonable in the second step (1B) of the cost screening process because the cost of masonry block and pile cap foundation exceed the reasonable allowance for the benefited receptors.

Noise Analysis Area 19

Noise Barrier System SW2001 + SW2007A

Consists of two noise barriers in combination that provide noise abatement for up to five benefited receptors. SW2001 was evaluated along the southbound I-15 edge of shoulder, from station 2002+00 to 2004+54 with a total length of approximately 255 feet and modeled in 2-foot height increments from 6 to 14 feet. SW2007A was evaluated along the southbound I-15 El Cerrito Road Off-Ramp edge of shoulder, from station 2005+00 to 2011+37 with a total length of approximately 637 feet and modeled in 2-foot height increments from 6 to 14 feet. Both barriers are conceptually proposed as masonry block sound walls on 836S concrete

barriers because they are located within the 30 foot clear recovery zone. The barriers are located on straight segments of the mainline and ramp, inside Caltrans R/W.

This barrier system is acoustically feasible at heights of 6 to 14 feet, and achieves the 7 dBA noise reduction design goal at combined barrier heights of 8 to 14 feet. However, neither the barrier system at constant heights of 8 or 14 feet, nor the Design Barrier system options were cost reasonable in the second step (1B) of the cost screening process because the cost of masonry block and concrete barrier foundation exceed the reasonable allowance for the benefited receptors.

Noise Barrier SW2007A

Provides noise abatement for up to five benefited receptors and was evaluated along the southbound I-15 El Cerrito Road Off-Ramp edge of shoulder, from station 2004+50 to 2011+37 with a total length of approximately 687 feet and modeled in 2-foot height increments from 6 to 14 feet. The barrier is conceptually proposed as a masonry block sound wall on Type 836S concrete barrier since it is located within the 30 foot clear recovery zone. This barrier is located on a straight segment of the ramp, inside Caltrans R/W.

The barrier is acoustically feasible at barrier heights of 6 to 14 feet and achieves the 7 dBA noise reduction design goal at barrier heights of 8 to 14 feet. However, neither the barrier at constant heights of 8 to 14 feet nor the Design Barrier options were cost reasonable in the last step (2) of the cost screening process because the cost of masonry block, pile cap foundation, and other ancillary costs exceed the reasonable allowance for the benefited receptors.

Noise Barrier SW2007B

Provides noise abatement for up to five benefited receptors and was evaluated along the R/W west of the southbound I-15 El Cerrito Road Off-Ramp, from station 2005+00 to 2011+00 with a total length of approximately 592 feet and modeled in 2-foot height increments from 6 to 20 feet. The barrier is conceptually proposed as a masonry block sound wall on Type 836S concrete barrier for continuity of an existing sound wall with the same type of foundation that ends at the ramp exit, and to accommodate future outside widening of the freeway and ramp, which would cause this barrier to be located within the 30 foot clear recovery zone. This barrier is located on a straight segment of the ramp, inside Caltrans R/W.

The barrier is acoustically feasible at barrier heights of 14 to 20 feet and achieves the 7 dBA noise reduction design goal at a barrier height of 16 feet. However, neither the barrier at a constant height of 16 feet nor the Design Barrier options were cost reasonable in the second step (1B) of the cost screening process because the cost of masonry block and concrete barrier foundation exceed the reasonable allowance for the benefited receptors.

Noise Barrier SW2007C

Provides noise abatement for up to six benefited receptors and was evaluated on private properties in place of existing walls and fences, from station 2005+50 to 2011+00 with a total length of approximately 638 feet and modeled in 2-foot height increments from 6 to 16 feet. The barrier is conceptually proposed as a masonry block sound wall on pile cap to minimize permanent easement requirements and potential impacts to the private properties. This barrier is located on top of a fill slope at the back of the properties, which are located on the west side of I-15.

The barrier is acoustically feasible at barrier heights of 6 to 16 feet and achieves the 7 dBA noise reduction design goal at barrier heights of 10 to 16 feet. However, neither the barrier at constant heights of 10 to 16 feet nor the Design Barrier options were cost reasonable in the last step (2) of the cost screening process because the cost of masonry block, pile cap foundation, and other ancillary costs exceed the reasonable allowance for the benefited receptors.

3.2. Non-acoustical Factors Relating to Feasibility

Factors not relating to acoustics that must be considered for noise barriers include: geometric standards, safety, maintenance, security, utility relocations, geotechnical considerations, and visual impacts. Additional factors to consider include opinions of affected residents, the general public, and from the public agencies involved. Social, economic, legal, and technological factors must also be taken into consideration.

The barrier alignments have been established at locations that are as far away from the travel way as possible, are accessible for maintenance purposes, and minimize impacts to existing utilities and drainage facilities. This is especially true for the two barrier systems that have been determined to be cost reasonable (SW1890A + SW1890B and SW1890A + SW1890C) which provide noise abatement for a large number of benefited receptors from the Terrano Apartments located on the north east quadrant of the I-15 Weirick Road/Dos Lagos Drive /interchange.

Construction of sound barrier SW1809A requires slight widening of the existing northbound I-15 bridge structure at the Weirick Road undercrossing to provide a standard 10 foot outside shoulder, which in the existing condition is approximately 9 foot wide. Girder strengthening plus replacement of the existing bridge overhang and concrete barrier would also be required to build the sound wall on the outside edge of the bridge.

A Visual Impacts Assessment (VIA) prepared for the Project and approved by Caltrans on May 10, 2024, concluded that the Project Build Alternative will be designed and implanted in a manner consistent with the existing visual character and quality of the area and will not

diminish visual resources. Costs for sound wall aesthetic treatments that may be required for visual mitigation cannot and have not been included in the constructions costs evaluated in this report.

The noise barriers were preliminarily designed to be in accordance with required geometric safety standards in such a way as to minimize or avoid these non-acoustical factors. If a final decision is made to construct any of the noise barriers evaluated, Caltrans should be consulted during the final design phase for any special reports, studies, or detailing that may be needed. Some of the factors mentioned above should be further evaluated during final design.

3.3. Preliminary Recommendation and Decision

Based on the analysis from the NSR, the 46 noise barriers presented in Table 3-1 are acoustically feasible and achieve the 7dBA noise reduction design goal. However, eight of them do not meet the minimum height needed to break the line-of-sight between an 11.5-foot-high truck stack and the first row of benefited receptors.

Out of the 46, only the two noise barrier systems SW1890A + SW1890B and SW1890A + SW1890C meet all the design criteria and have a total construction cost below the reasonable allowance for the benefited receptors, therefore are deemed cost reasonable. Both barrier systems are alternatives to provide noise abatement for receptors at the Terrano Apartments, and only one system would be selected for further consideration to be included as part of the Project.

The preliminary noise abatement decision presented in this report is based on preliminary project alignments and profiles, which may be subject to change. As such, the physical characteristics of noise abatement described herein also may be subject to change. If pertinent parameters change substantially during the final project design, the preliminary noise abatement decision may be changed or eliminated from the final project design. A final decision to construct noise abatement will be made upon completion of the project design.

The preliminary noise abatement decision presented here will be included in the draft environmental document, which will be circulated for public review.

4. Secondary Effects of Abatement

The noise abatement recommended in the preliminary noise abatement decision could have the potential to result in secondary effects on cultural resources, scenic views, hazardous materials, biology, utility and/or landscaping impacts, or other resources.

Based on the analysis results of this study, barrier systems SW1890A + SW1890B and SW1890A + SW1890C are cost reasonable and meet the design criteria, but only one system would be considered for construction since both systems provide noise abatement for the same community. If a decision is made to build either of these barrier systems, Caltrans should be consulted during the final design phase for any special reports, studies, or detailing that may be needed. With the best information available at the time this report was prepared and the conclusions from other technical studies completed to date for the Project, the following assessment of secondary effects of abatement was made for the two noise barrier systems:

Cultural Resources

Both barrier systems are proposed within existing State right of way in previously disturbed areas of the northbound I-15 Weirick Road/Dos Lagos Drive interchange. Although it is unlikely that the shallow excavations needed for sound wall construction would uncover or affect paleonthological resources, a Paleonthological Mitigation Plan for the Project will be prepared during final design that will include mitigation measures should any paleonthological resources be encountered during construction of one of the two noise barrier systems. This is consistent with the recommendations from the Project's Paleontological Identification Report / Paleontological Evaluation Report (Paleo Solutions, Inc. 2021).

Scenic Views

According to the VIA (HDR 2024) the Project limits are not located within a designated state scenic highway and the Project Build Alternative is not anticipated to result in adverse visual changes because the proposed elements will be consistent with the existing visual character and quality, and will not degrade the surrounding area. Any recommendations identified in the VIA for aesthetic treatments to mitigate visual impacts that may result from construction of the noise barriers will be evaluated during the final design phase of the Project.

Hazardous materials

Based on records search and field reconnaissance data included in the Project's Initial Site Assessment (HDR 2021), no contaminant sources or recognized environmental conditions (RECs) were identified within the Project study area. However, asbestos containing material

is present in the gray felt pad along the guardrails of the Weirick Road bridge and additional sampling and handling procedures will be determined during final design of the Project.

Results from soil samples taken within Caltrans right of way including the median, shoulders, and ramps classified the soil as unregulated Type X which is non-hazardous and suitable for reuse on site. A Lead Compliance Plan is still required prior to construction for worker safety. Any other construction generated hazardous waste will be handled, stored, and disposed of in accordance with Caltrans Standard Specifications.

Biology

Since both barrier systems are proposed in previously disturbed areas of the northbound I-15 Weirick Road/Dos Lagos Drive interchange, construction of either one of the barrier systems is not anticipated to result in direct impacts to any threatened or endangered plants, nor to any other biological resources. Water pollution and erosion control plans will be created during final design and implemented during construction. A full list of avoidance and mitigation measures is included in the Natural Environmental Study for the Project (ICF 2023) should any protected species or habitat be encountered during construction of one of the two noise barrier systems.

Utility and/or Landscaping Impacts

Based on preliminary review of existing utilities, barriers SW1890B or SW1890C have the potential to impact existing Caltrans fiber optic lines located across and along the outside of the northbound Weirick Road On-Ramp. Further investigation and positive location of existing utilities at the proposed barrier locations will be required prior to construction to identify potential conflicts and relocation needs. The cost for potential relocation of the existing fiber optic line has not been included in the preliminary cost estimate for these noise barriers since the exact location and depth of the line is uncertain at this time.

In the existing condition the infield and outside areas of the northbound Weirick Road On-Ramp where the noise barriers are proposed do not appear to have landscaping nor irrigation systems. It is anticipated that barrier SW1890B proposed along the ramp's outside edge of shoulder would require removal of one large tree located to the right and in close proximity to the ramp's intersection with Weirick Road. Likewise, SW1890C proposed adjacent to the right of way line on the east side I-15 is anticipated to require the removal of up to two existing large trees. Replacement of trees and vegetation will be at a ratio determined by the Caltrans Landscape Architect.

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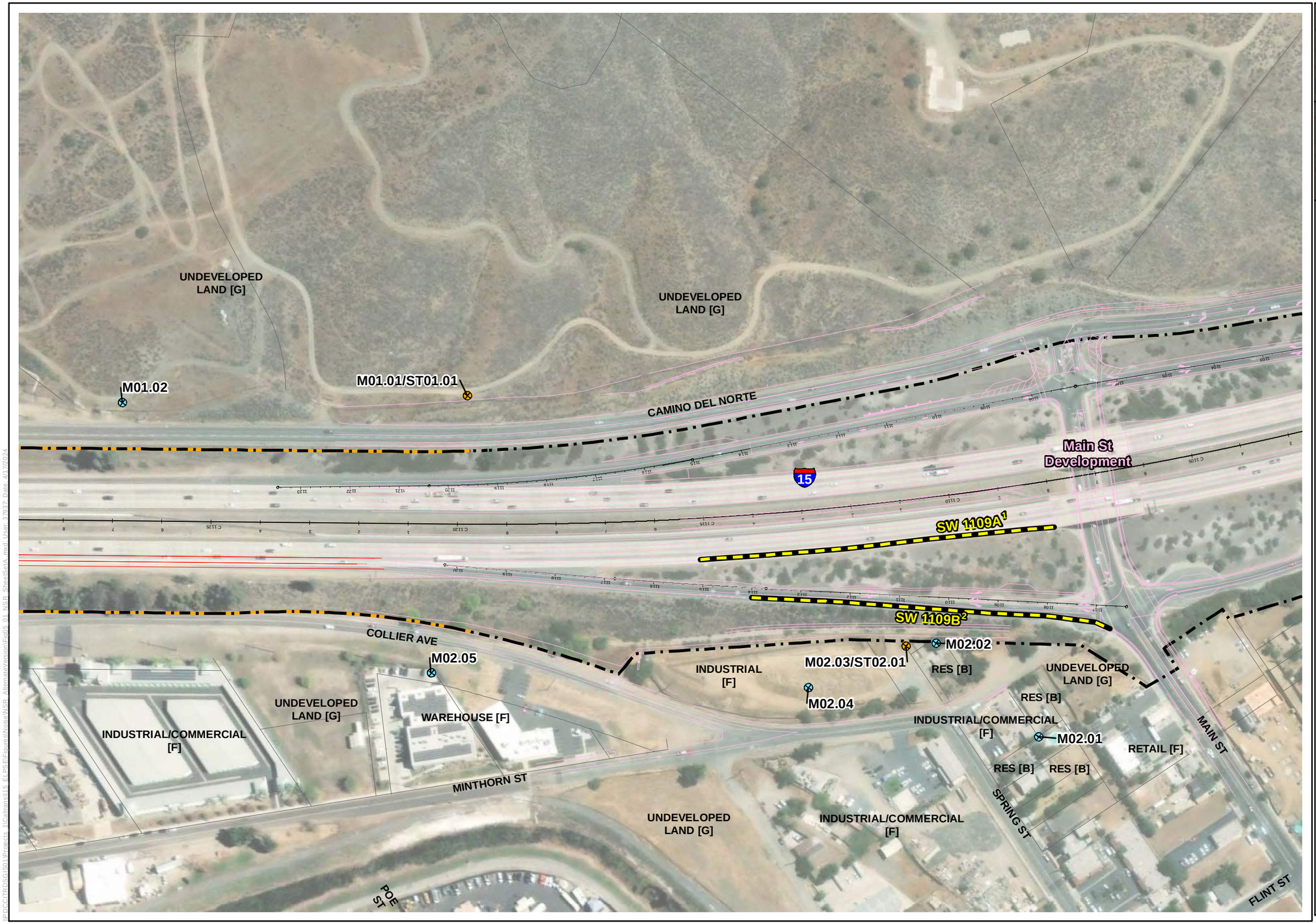
Appendix A

Noise Measurement and Modeled Locations, and Evaluated Noise Barriers (Figure 5-1 from the NSR)

0 1 2 Miles

1:70,000

Figure 5-1, Index Sheet
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

[1] Not Acoustically Feasible

[2] Acoustically Feasible but Failed to Meet Design Goal

[3] Acoustically Feasible and Met Design Goal

[A] - Activity Category A Land Uses
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 1a of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension

Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

[1] Not Acoustically Feasible

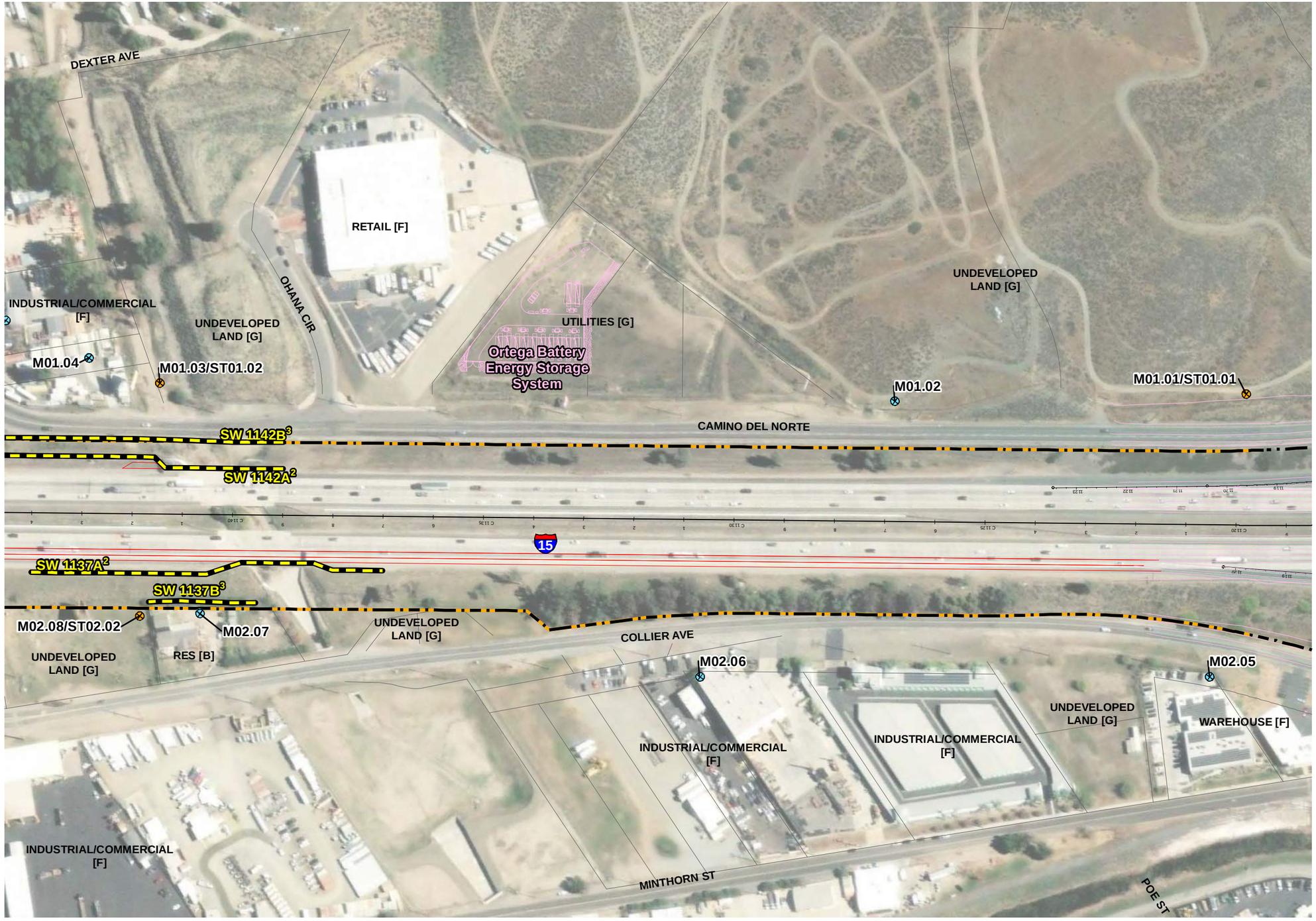
[2] Acoustically Feasible but Failed to Meet Design Goal

[3] Acoustically Feasible and Met Design Goal

[A] - Activity Category A Land Uses
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 1b of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

[1] Not Acoustically Feasible

[2] Acoustically Feasible but Failed to Meet Design Goal

[3] Acoustically Feasible and Met Design Goal

[A] - Activity Category A Land Uses
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 2 of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension

Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

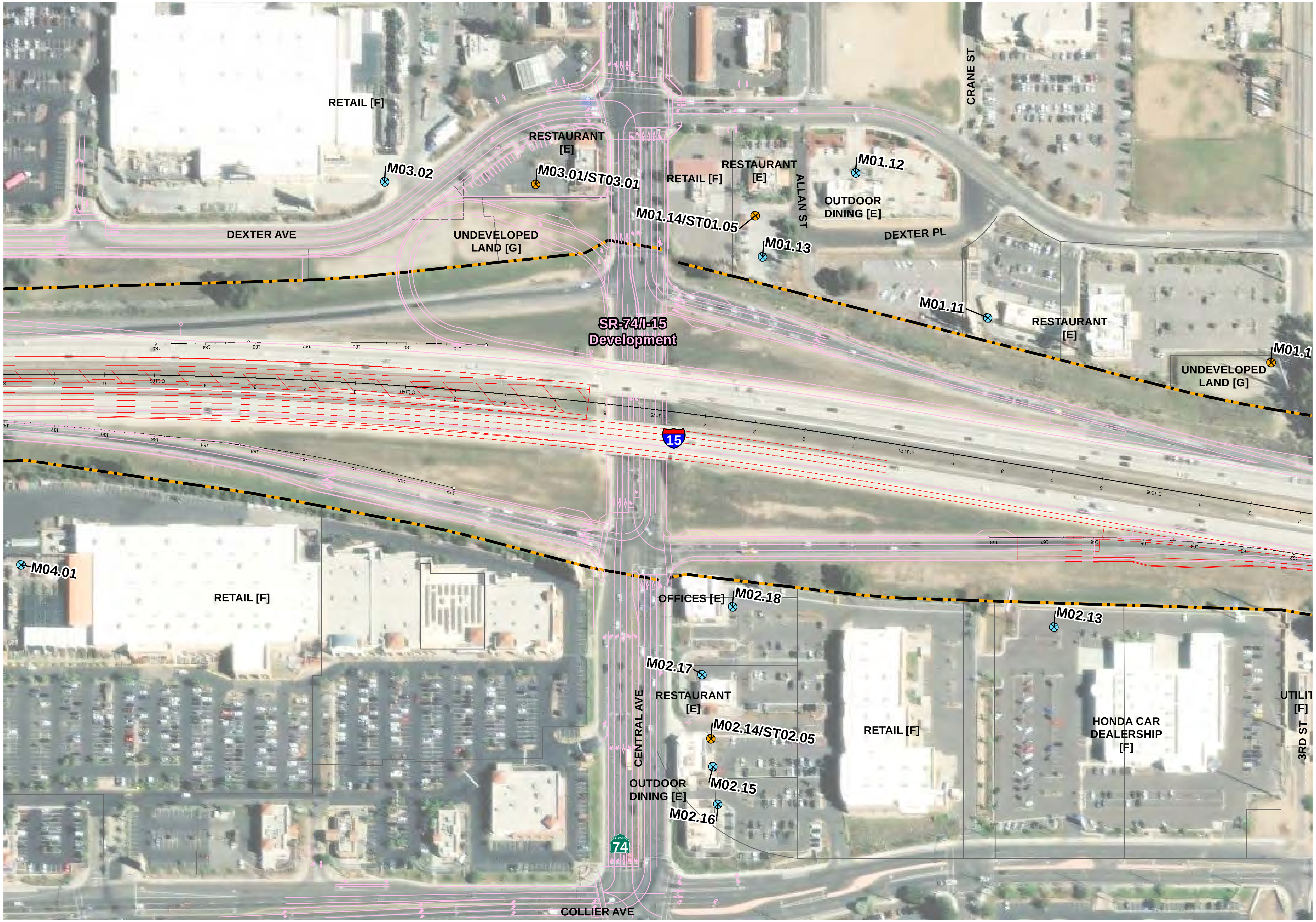
[1] Not Acoustically Feasible

[2] Acoustically Feasible but Failed to Meet Design Goal

[3] Acoustically Feasible and Met Design Goal

[A] - Activity Category A Land Uses
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

Figure 5-1, Sheet 3 of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

[1] Not Acoustically Feasible

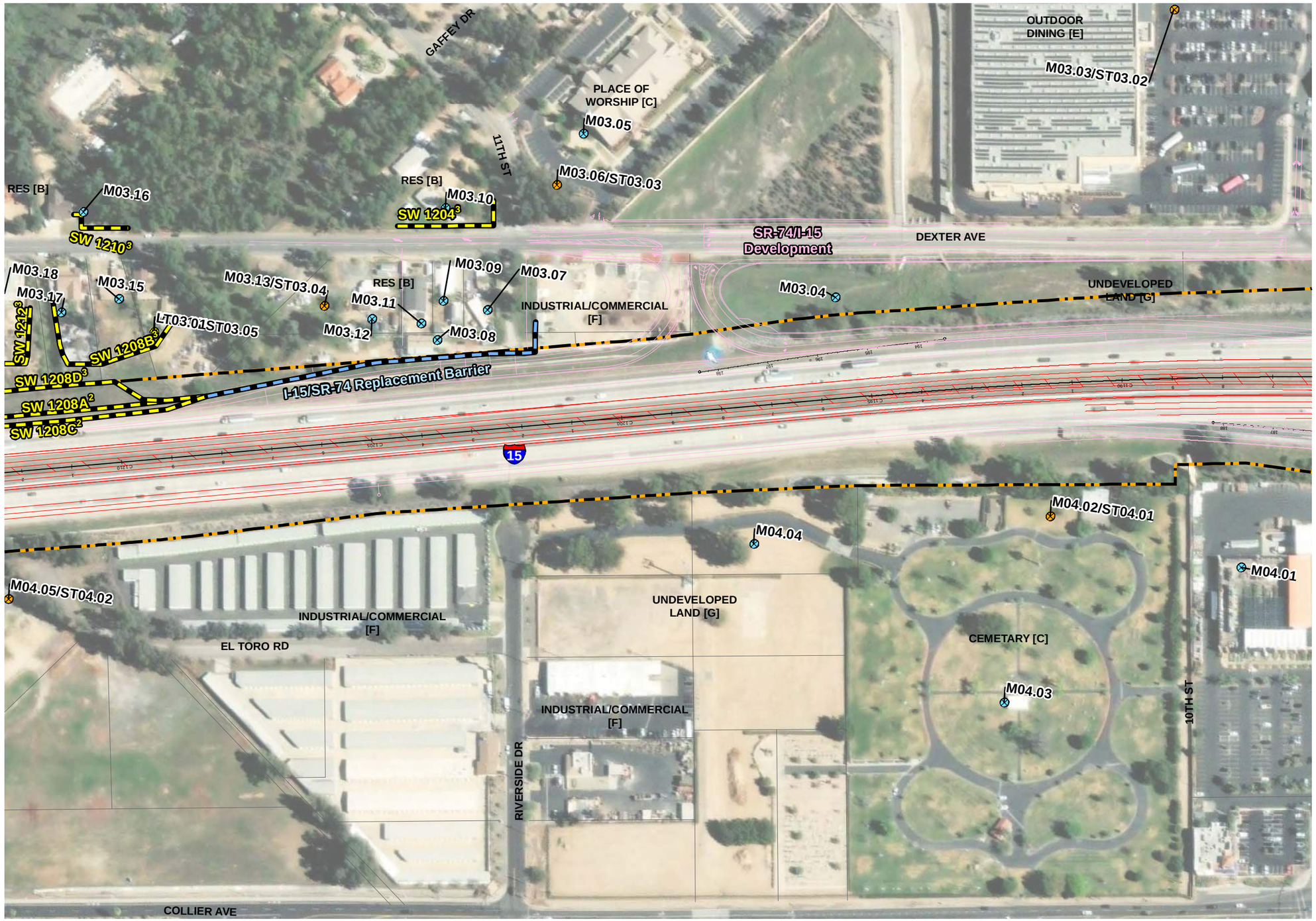
[2] Acoustically Feasible but Failed to Meet Design Goal

[3] Acoustically Feasible and Met Design Goal

[A] - Activity Category A Land Uses
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 4 of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

[1] Not Acoustically Feasible

[2] Acoustically Feasible but Failed to Meet Design Goal

[3] Acoustically Feasible and Met Design Goal

[A] - Activity Category A Land Uses
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 5a of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension

Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

[1] Not Acoustically Feasible

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[3] Acoustically Feasible and Met Design Goal

[A] - Activity Category A Land Uses
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 6a of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension

Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

[1] Not Acoustically Feasible

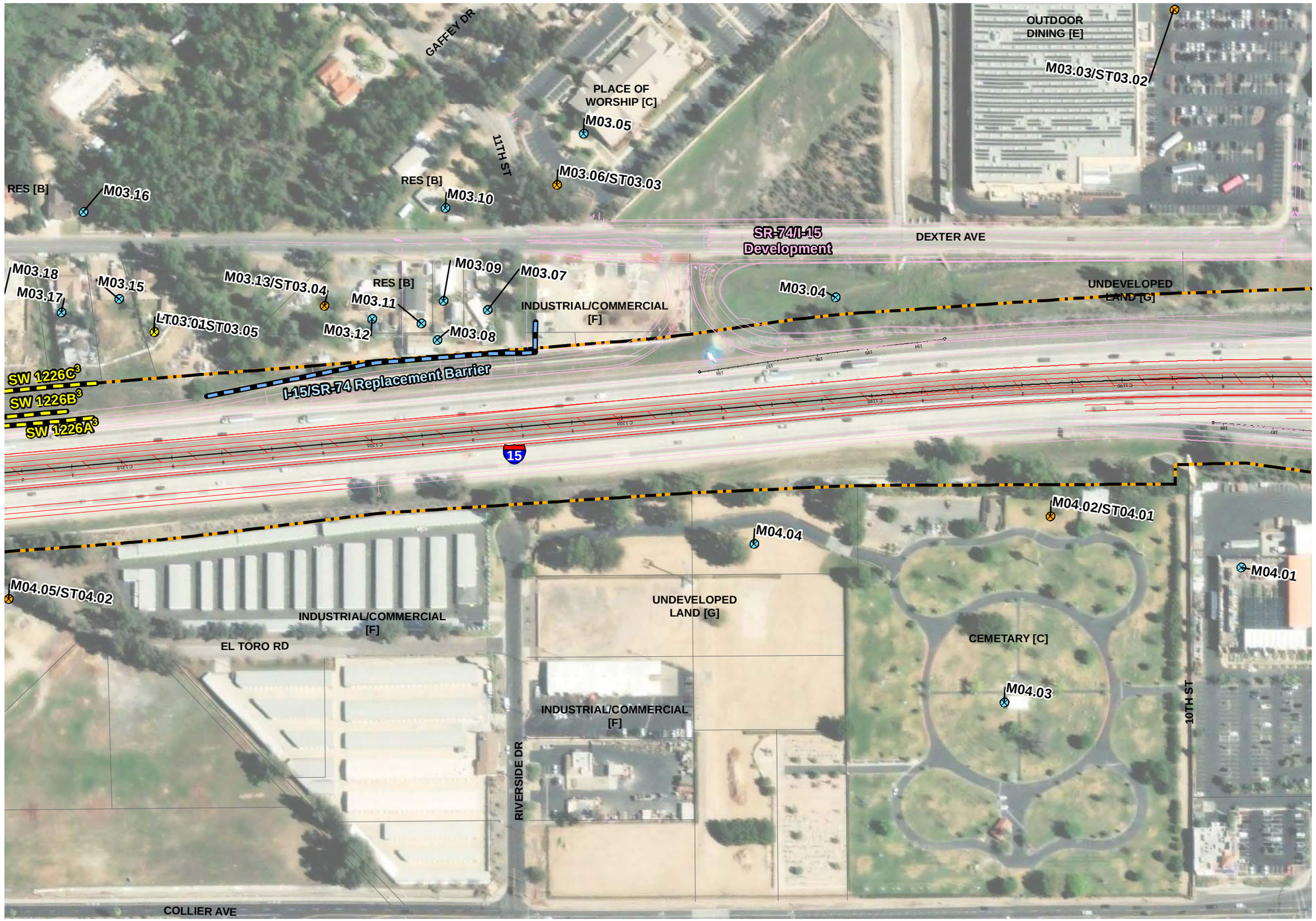
[2] Acoustically Feasible but Failed to Meet Design Goal

[3] Acoustically Feasible and Met Design Goal

[A] - Activity Category A Land Uses
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 7a of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

[1] Not Acoustically Feasible

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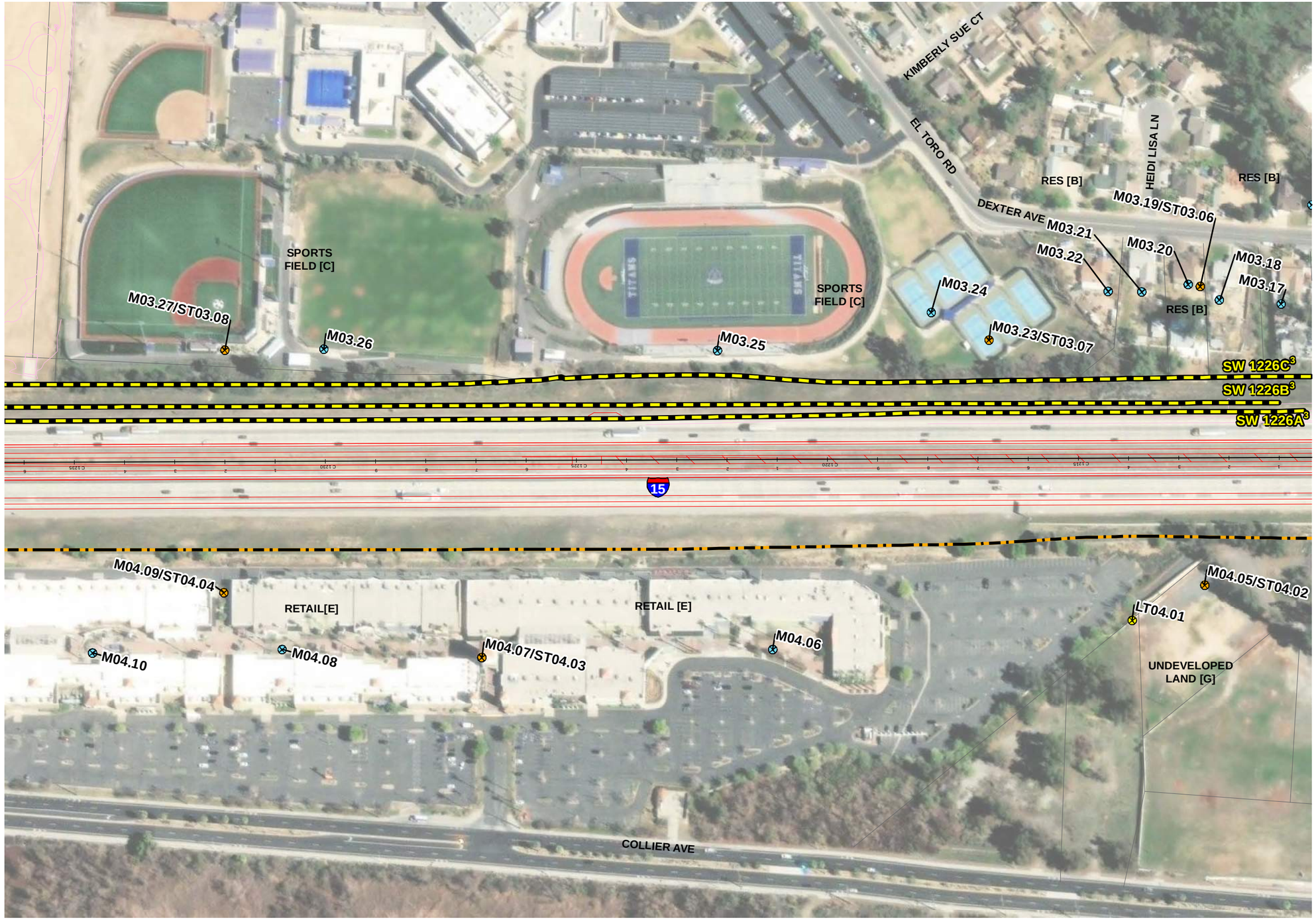
[A] - Activity Category A Land Uses
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 5b of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

[1] Not Acoustically Feasible

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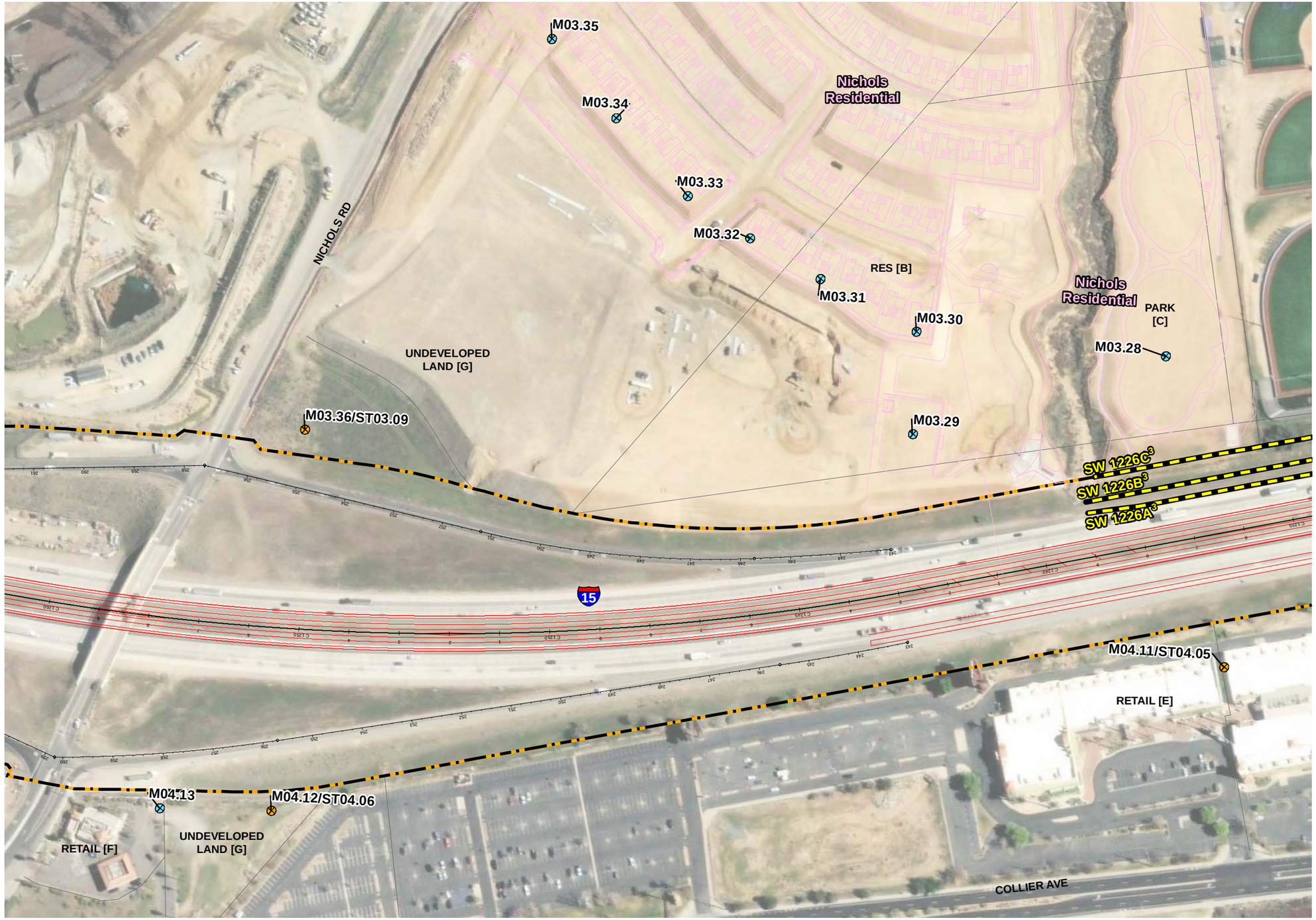
[3] Acoustically Feasible and Met Design Goal

[A] - Activity Category A Land Uses
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 6b of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

[1] Not Acoustically Feasible

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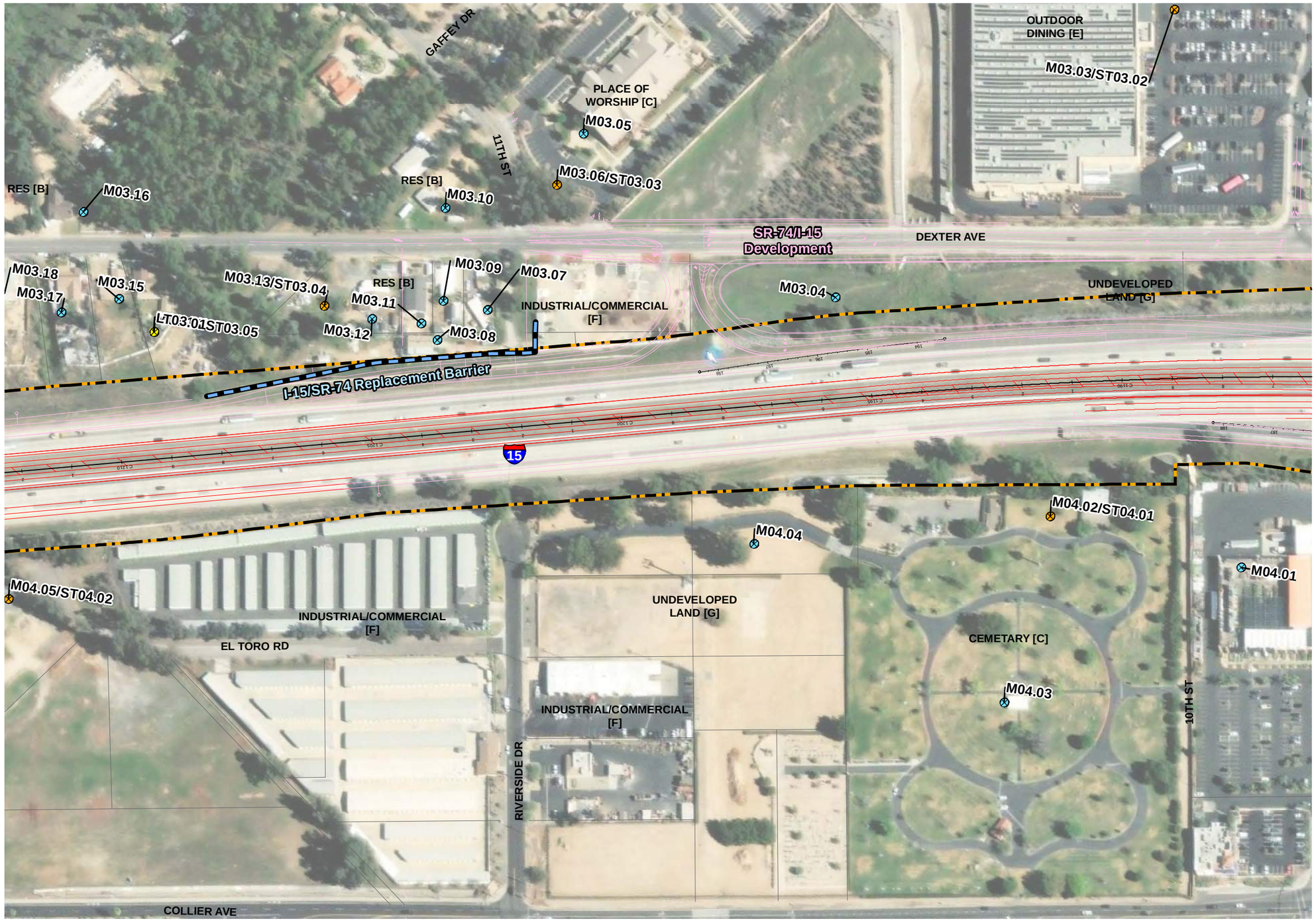
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 7b of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

[1] Not Acoustically Feasible

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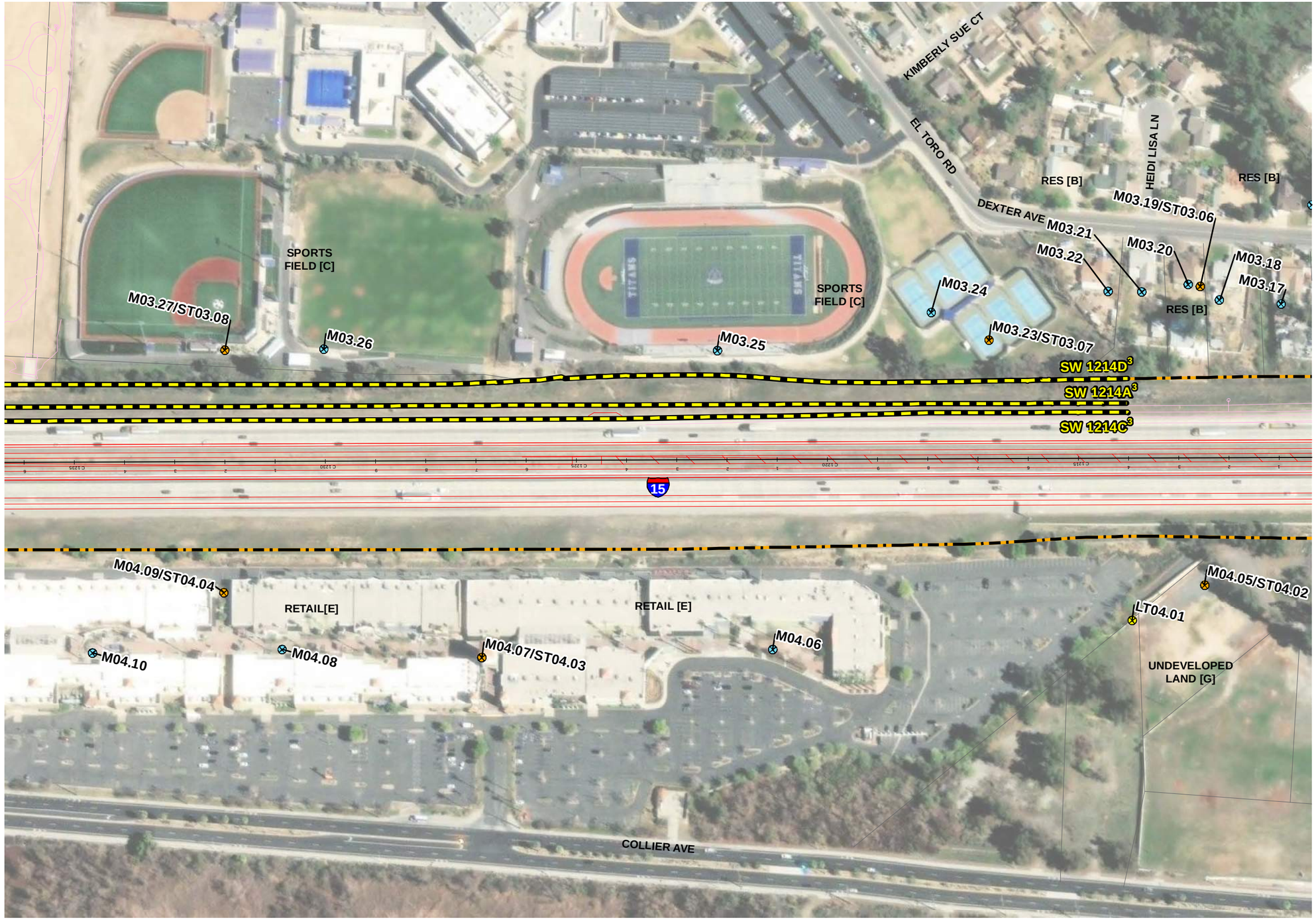
[A] - Activity Category A Land Uses
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 5c of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

[1] Not Acoustically Feasible

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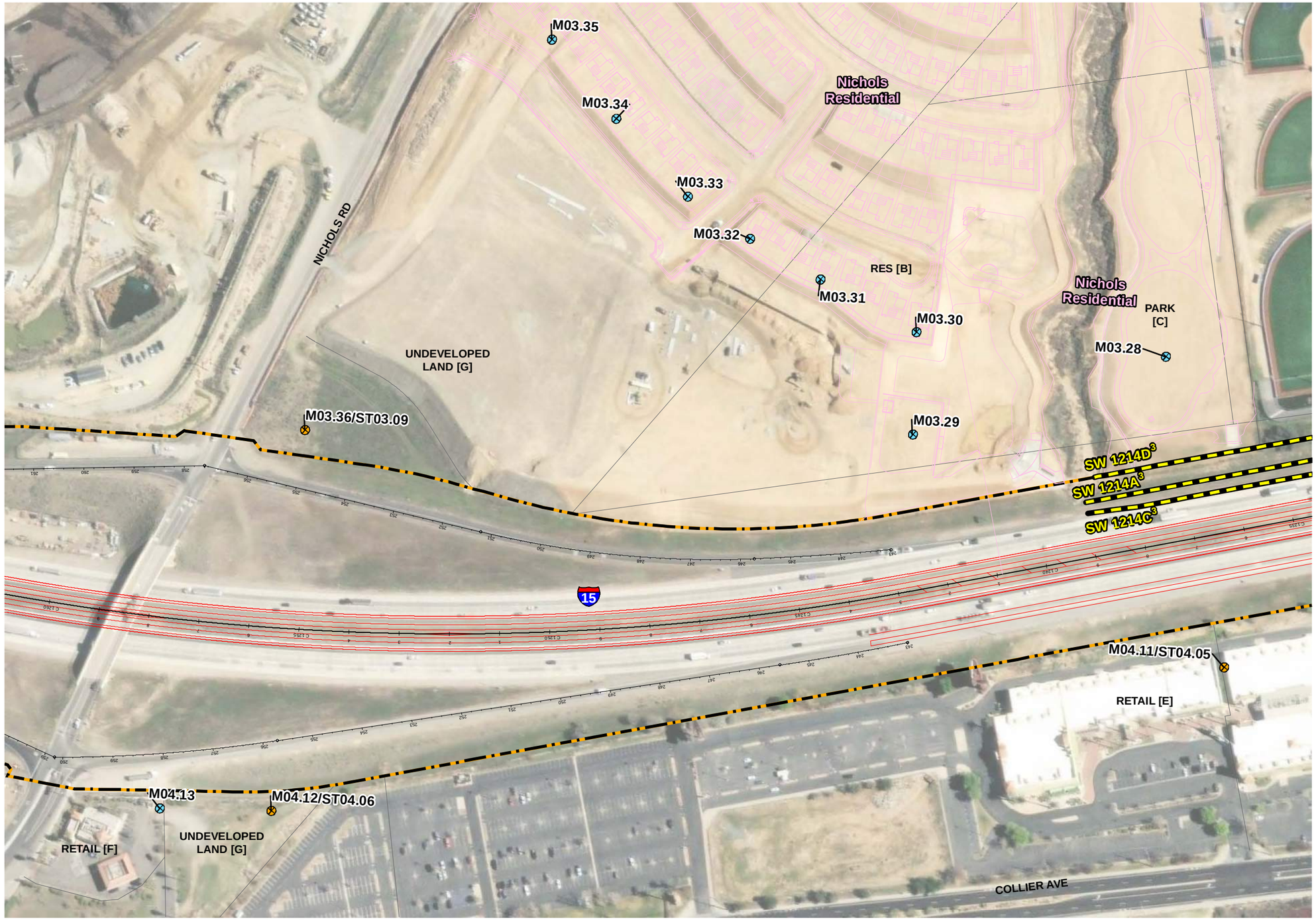
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 6c of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
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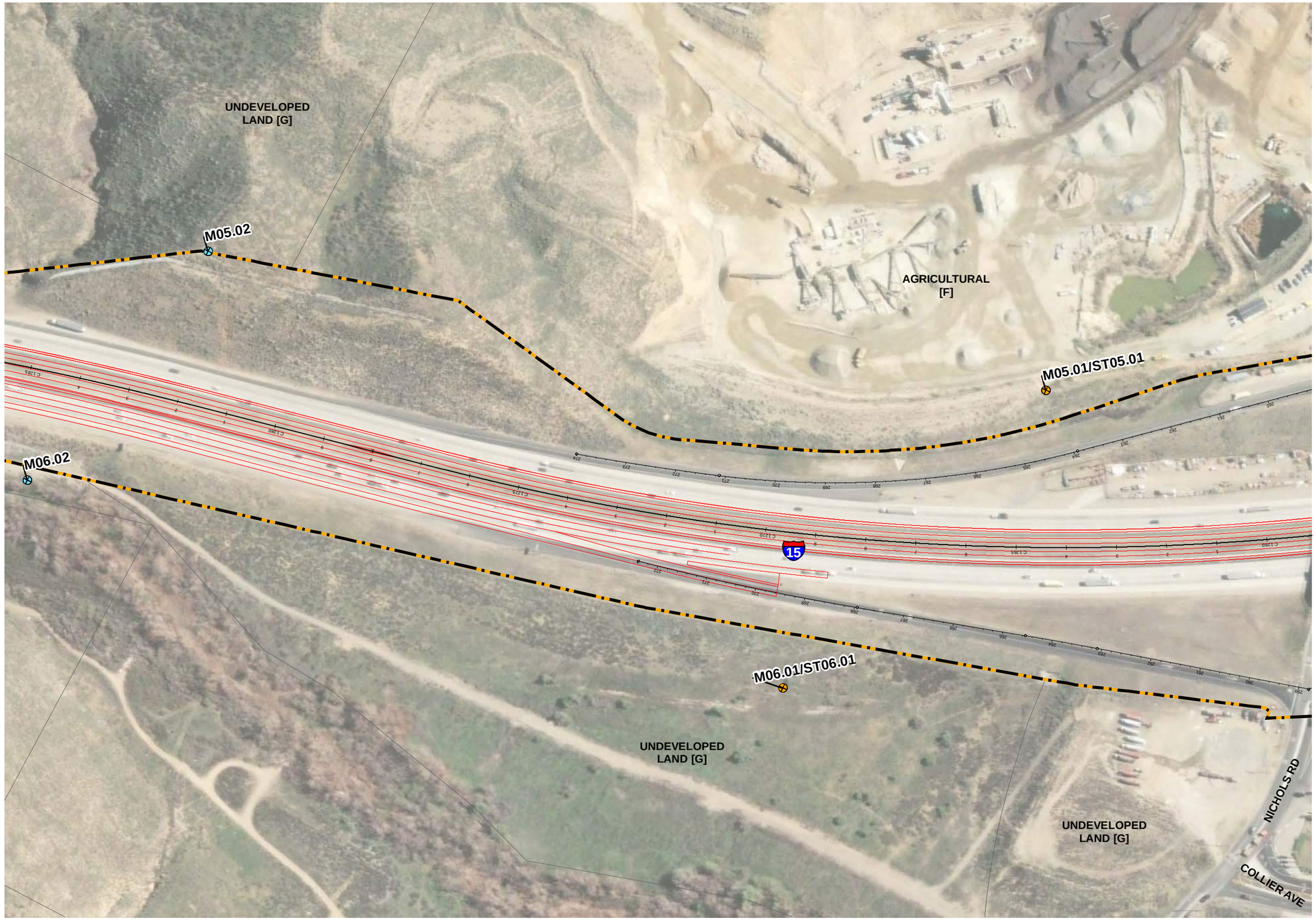
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 7c of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
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- Planned Future Projects
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[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 8 of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension

Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

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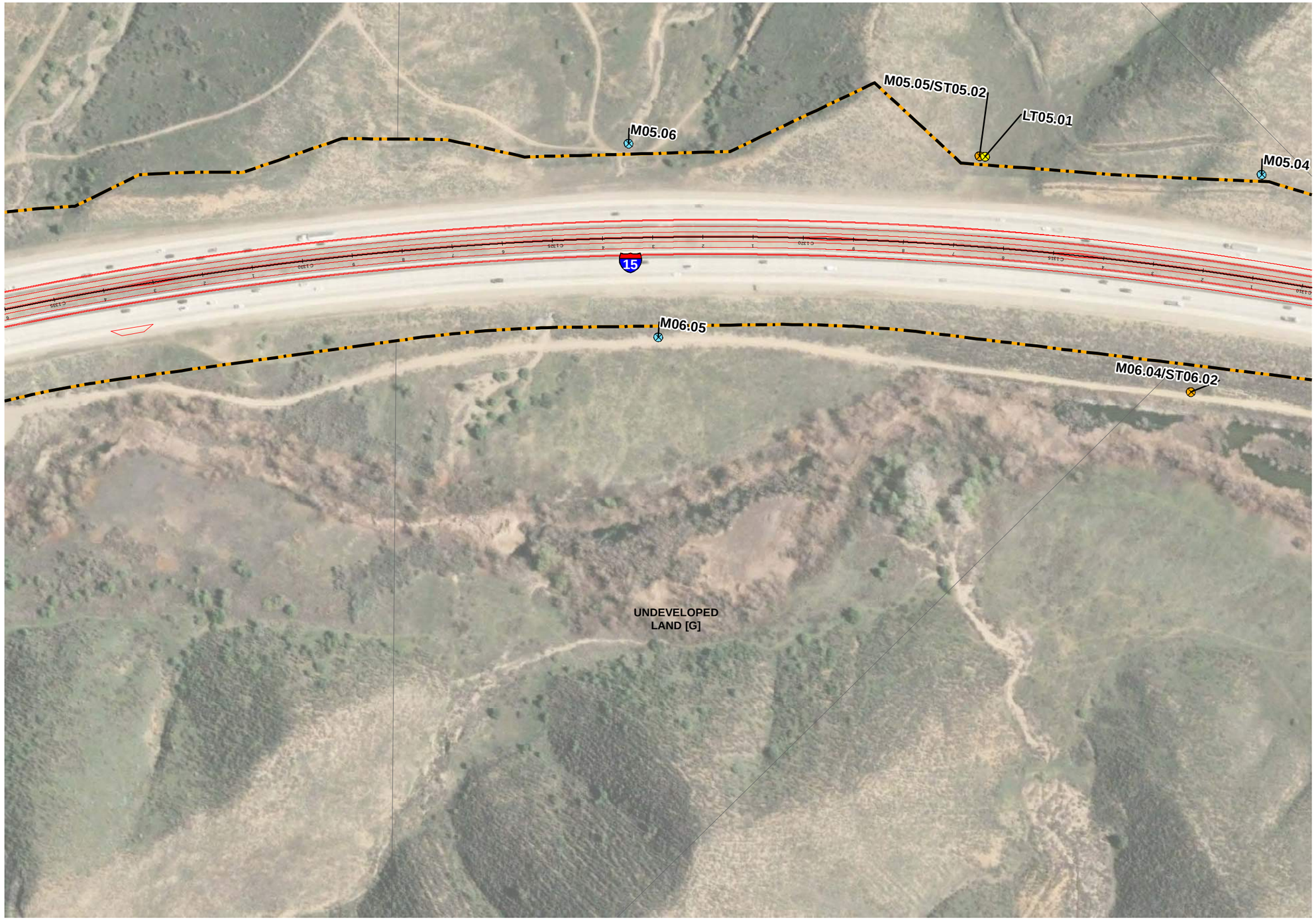
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200
Feet
1:2,400

Figure 5-1, Sheet 9 of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

[1] Not Acoustically Feasible

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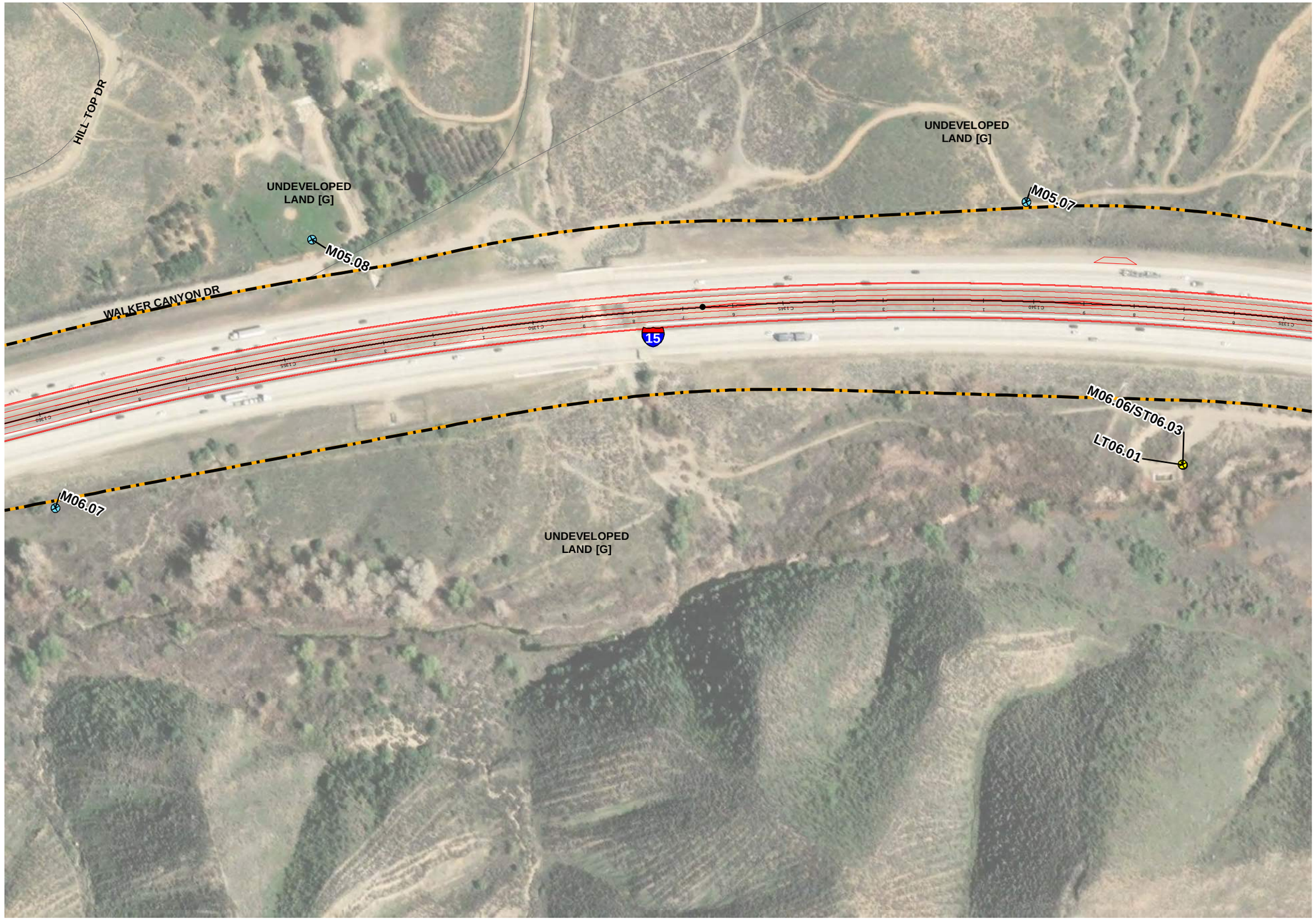
[A] - Activity Category A Land Uses
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200
Feet
1:2,400

Figure 5-1, Sheet 10 of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

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[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 11 of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension

Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

[1] Not Acoustically Feasible

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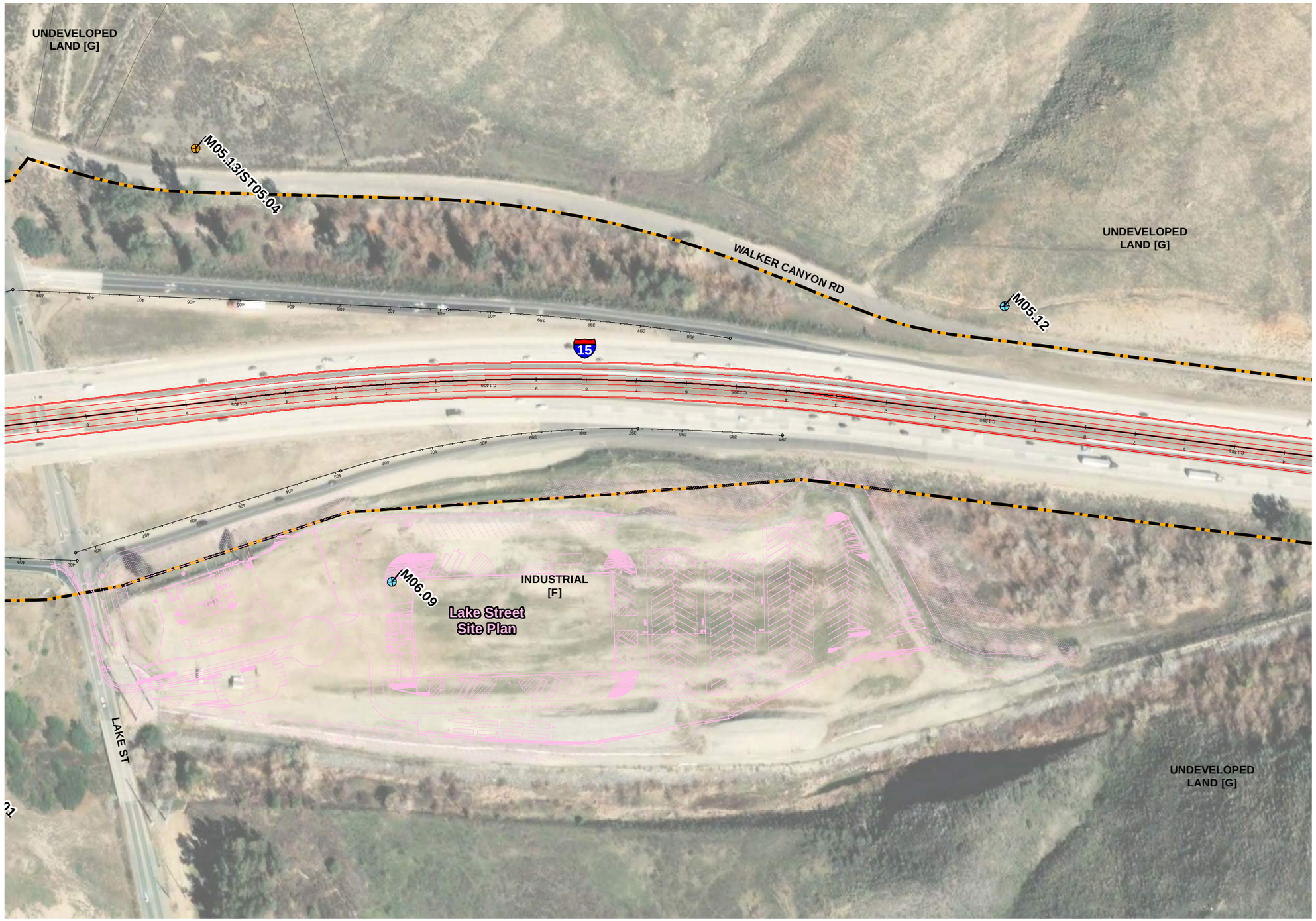
[3] Acoustically Feasible and Met Design Goal

[A] - Activity Category A Land Uses
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 12 of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

[1] Not Acoustically Feasible

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[A] - Activity Category A Land Uses
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200
Feet
1:2,400

Figure 5-1, Sheet 13 of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension

Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
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[A] - Activity Category A Land Uses
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 14 of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension

Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

[1] Not Acoustically Feasible

[2] Acoustically Feasible but Failed to Meet Design Goal

[3] Acoustically Feasible and Met Design Goal

[A] - Activity Category A Land Uses
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 15 of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension

Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

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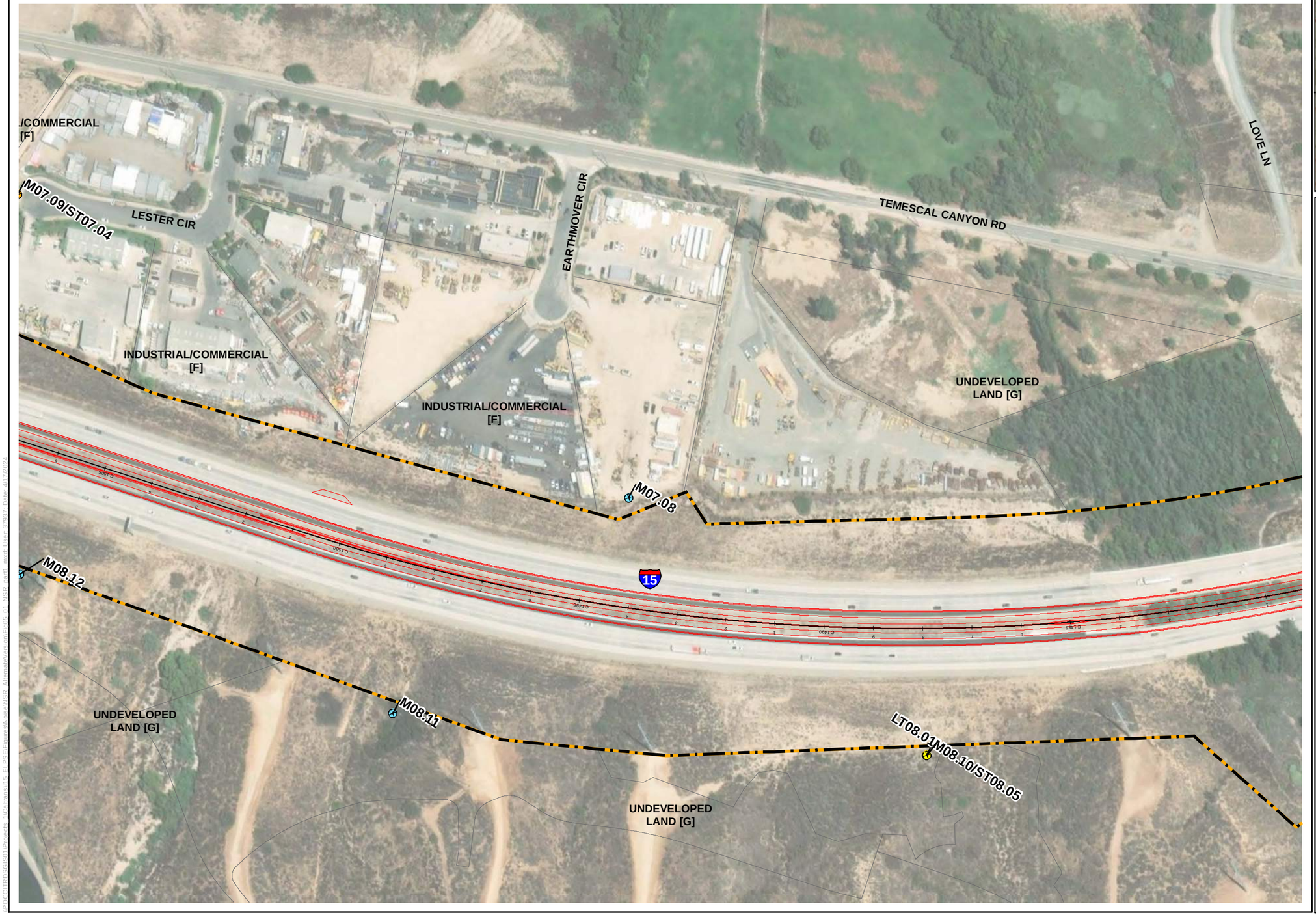
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 16 of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

[1] Not Acoustically Feasible

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[3] Acoustically Feasible and Met Design Goal

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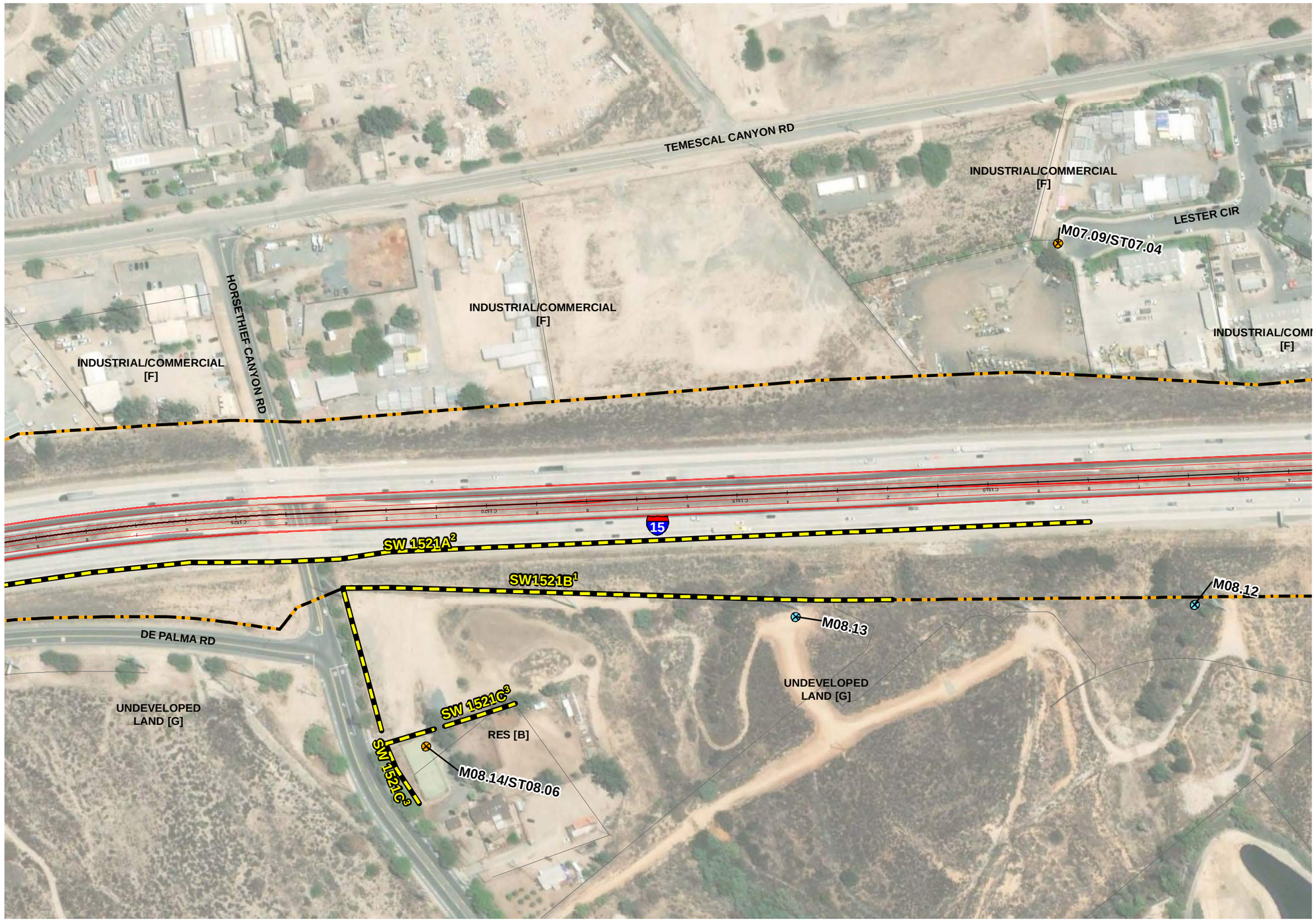
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 17 of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
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[3] Acoustically Feasible and Met Design Goal

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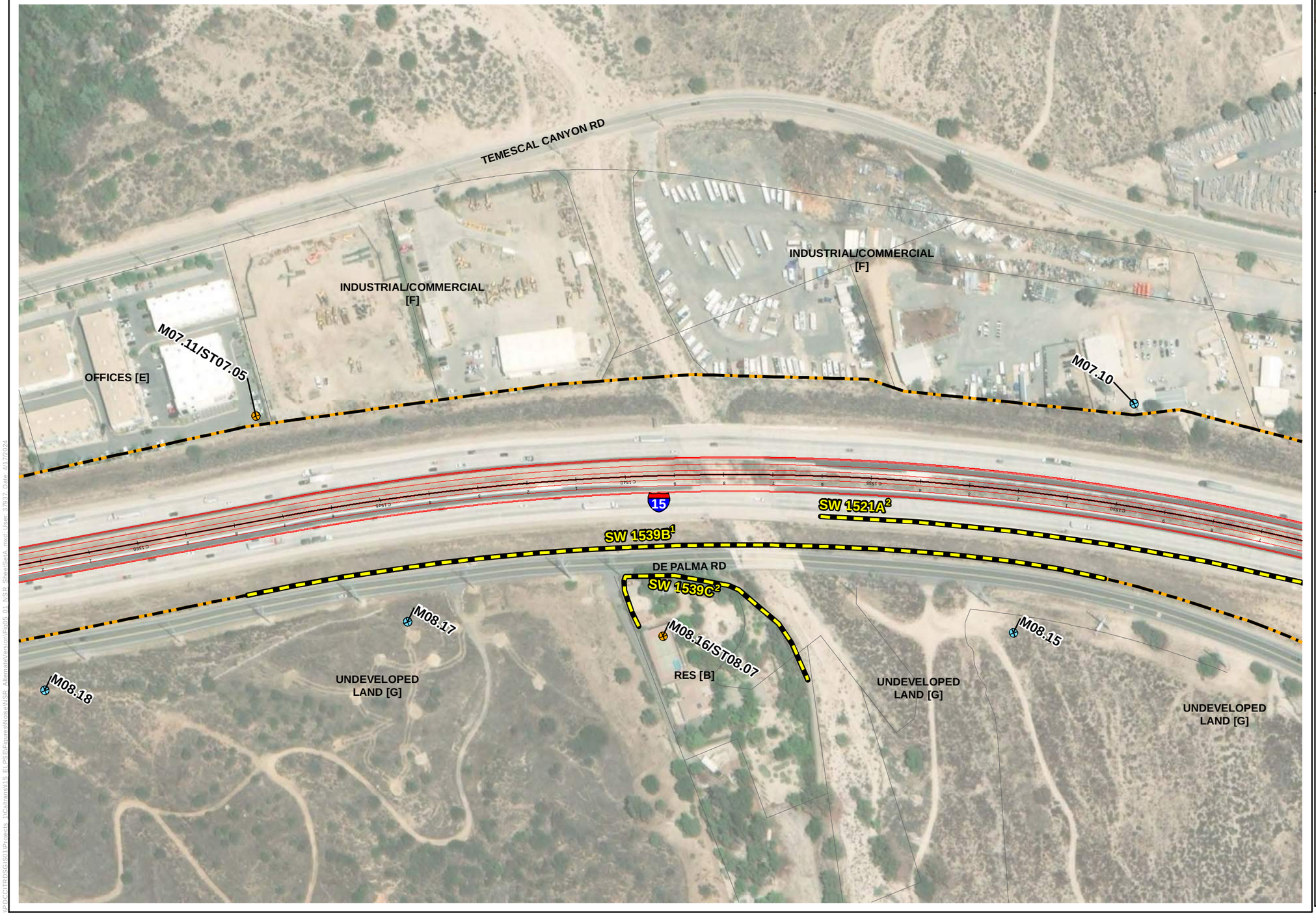
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 18a of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

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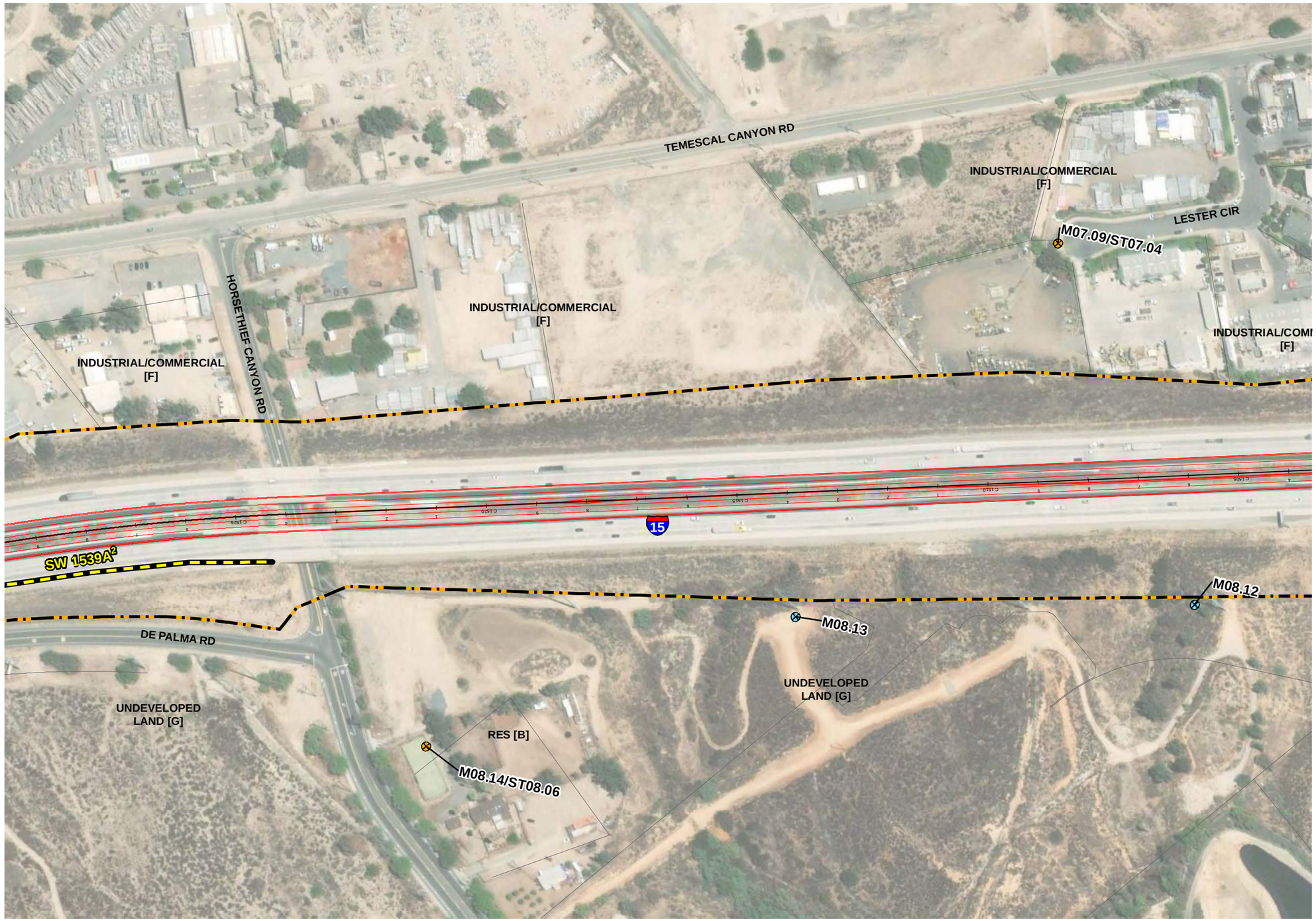
[3] Acoustically Feasible and Met Design Goal

[A] - Activity Category A Land Uses
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 19a of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
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[1] Not Acoustically Feasible

[2] Acoustically Feasible but Failed to Meet Design Goal

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[A] - Activity Category A Land Uses
[B] - Activity Category B Land Uses
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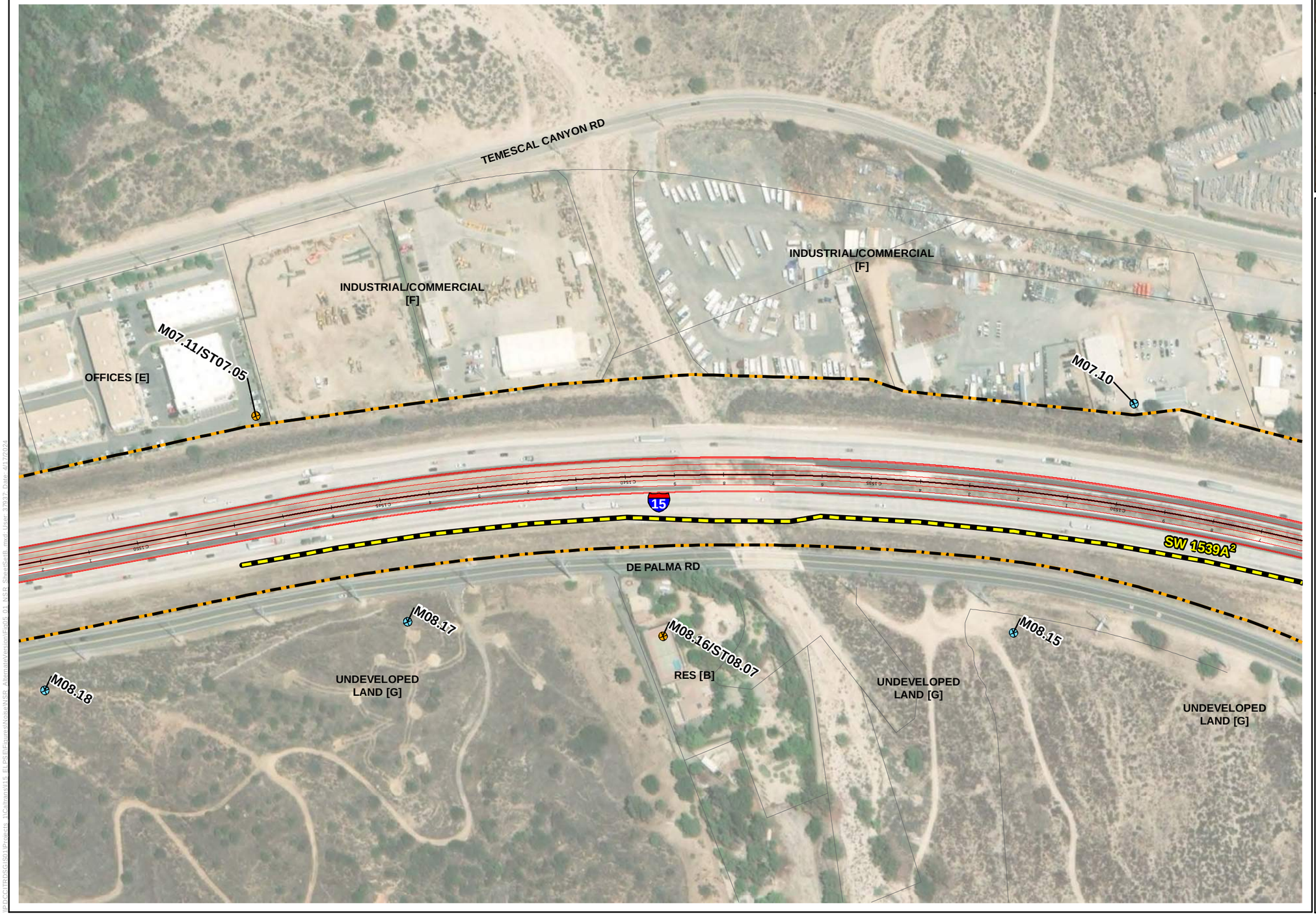
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 18b of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
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[2] Acoustically Feasible but Failed to Meet Design Goal

[3] Acoustically Feasible and Met Design Goal

[A] - Activity Category A Land Uses
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 19b of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension

Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

[1] Not Acoustically Feasible

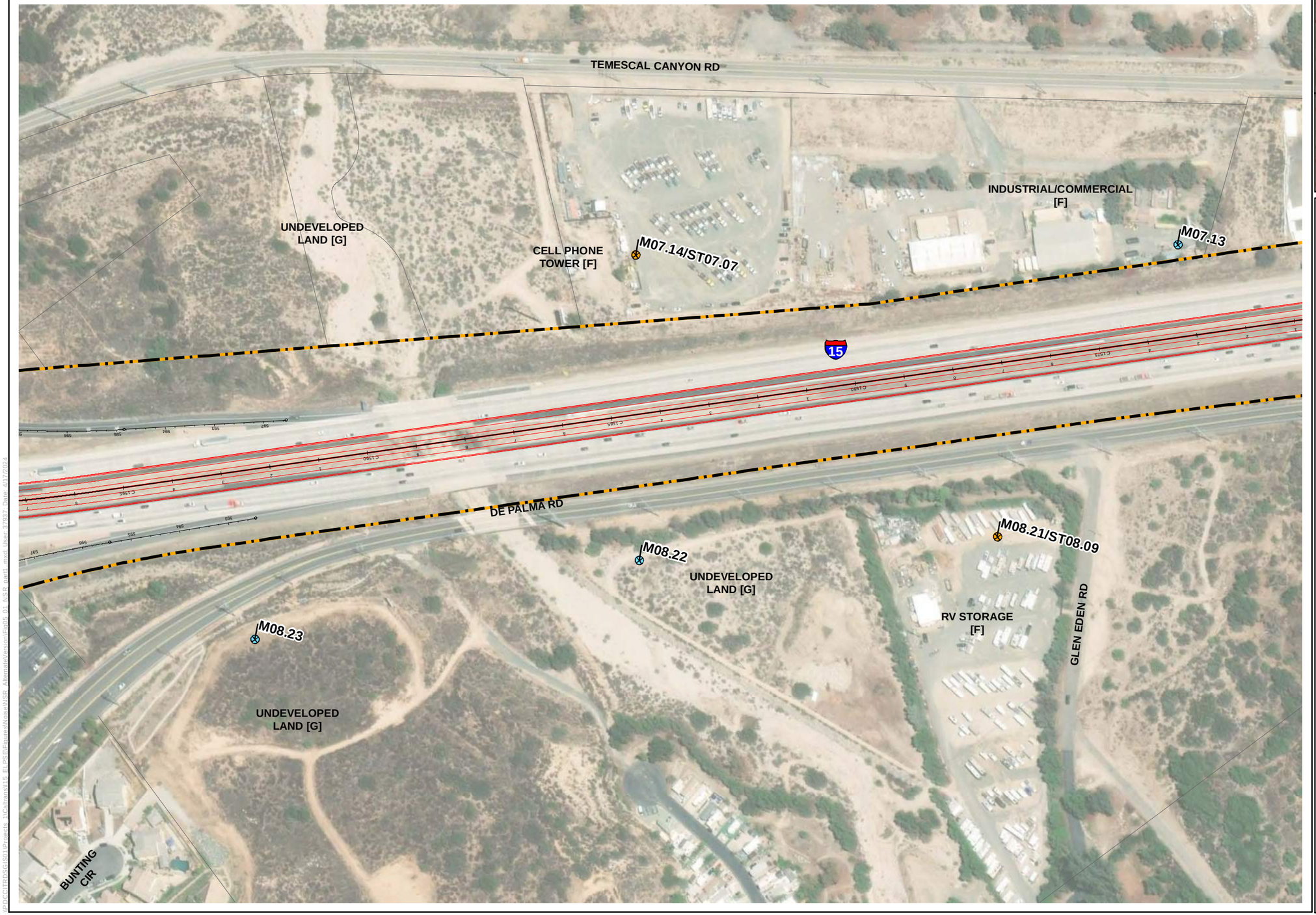
[2] Acoustically Feasible but Failed to Meet Design Goal

[3] Acoustically Feasible and Met Design Goal

[A] - Activity Category A Land Uses
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 20 of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

[1] Not Acoustically Feasible

[2] Acoustically Feasible but Failed to Meet Design Goal

[3] Acoustically Feasible and Met Design Goal

[A] - Activity Category A Land Uses
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 21 of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension

Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

[1] Not Acoustically Feasible

[2] Acoustically Feasible but Failed to Meet Design Goal

[3] Acoustically Feasible and Met Design Goal

[A] - Activity Category A Land Uses
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 22 of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension

Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

[1] Not Acoustically Feasible

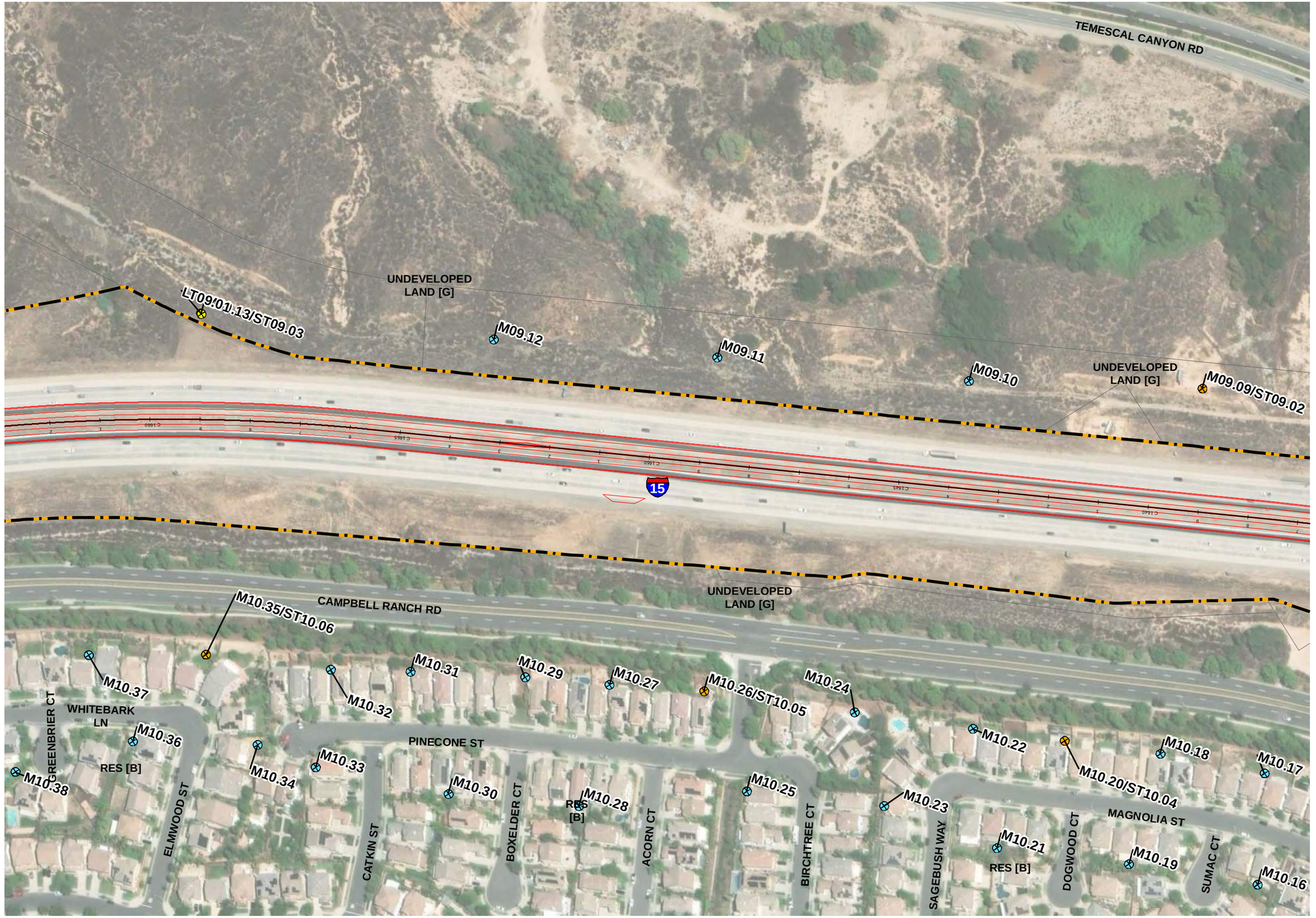
[2] Acoustically Feasible but Failed to Meet Design Goal

[3] Acoustically Feasible and Met Design Goal

[A] - Activity Category A Land Uses
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 23 of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

[1] Not Acoustically Feasible

[2] Acoustically Feasible but Failed to Meet Design Goal

[3] Acoustically Feasible and Met Design Goal

[A] - Activity Category A Land Uses
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 24 of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension

Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

[1] Not Acoustically Feasible

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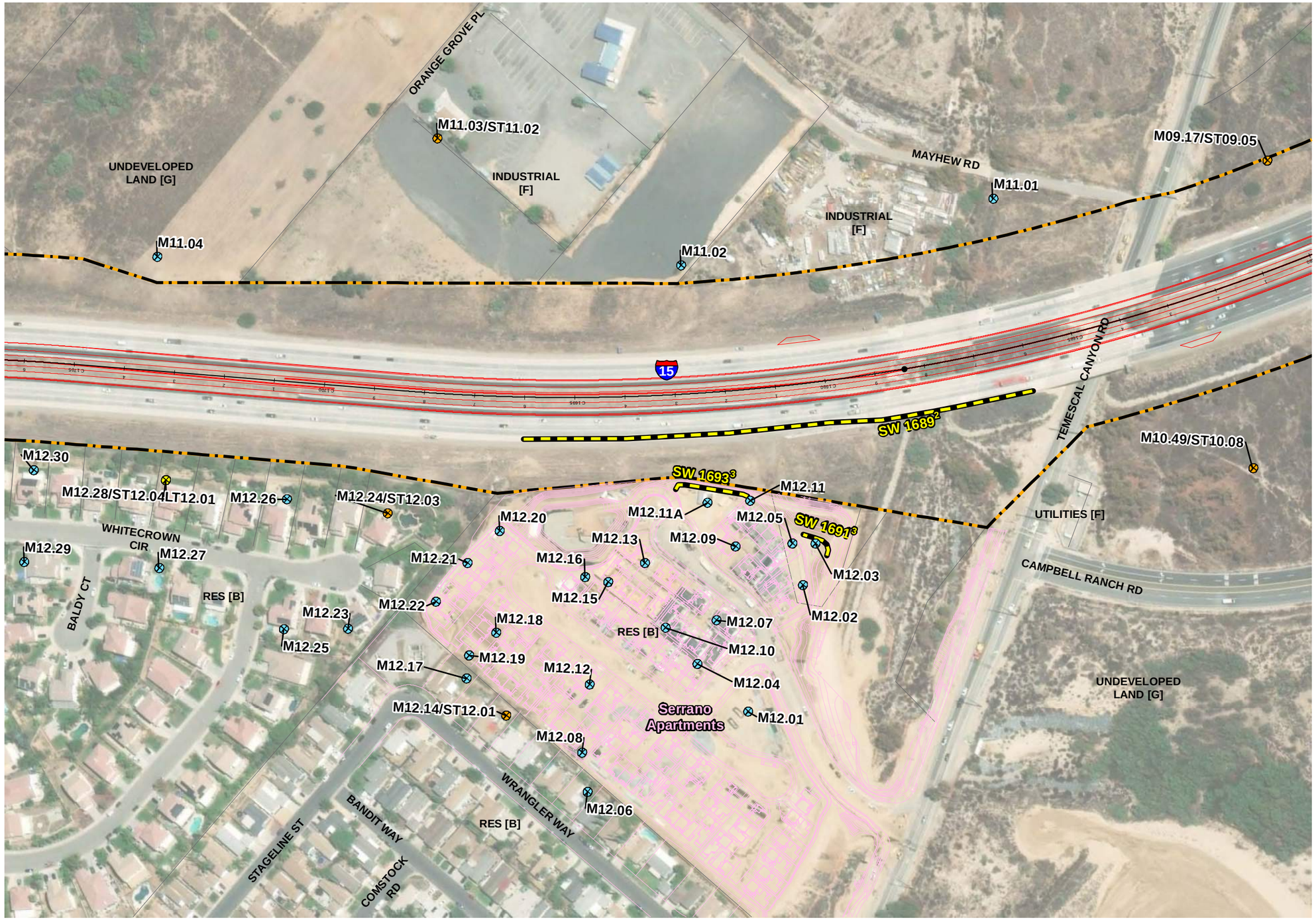
[3] Acoustically Feasible and Met Design Goal

[A] - Activity Category A Land Uses
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 25 of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

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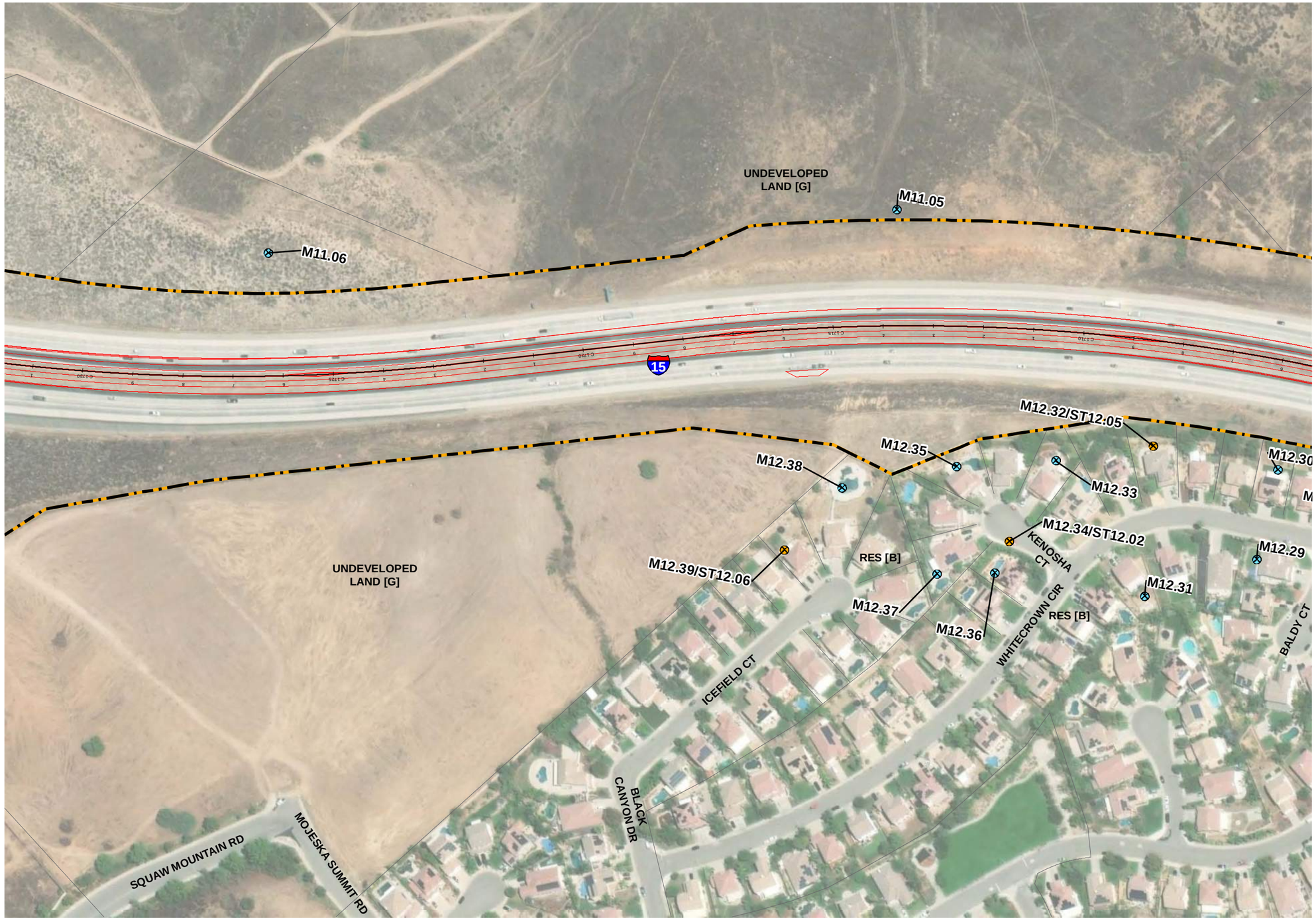
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 26 of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

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[A] - Activity Category A Land Uses
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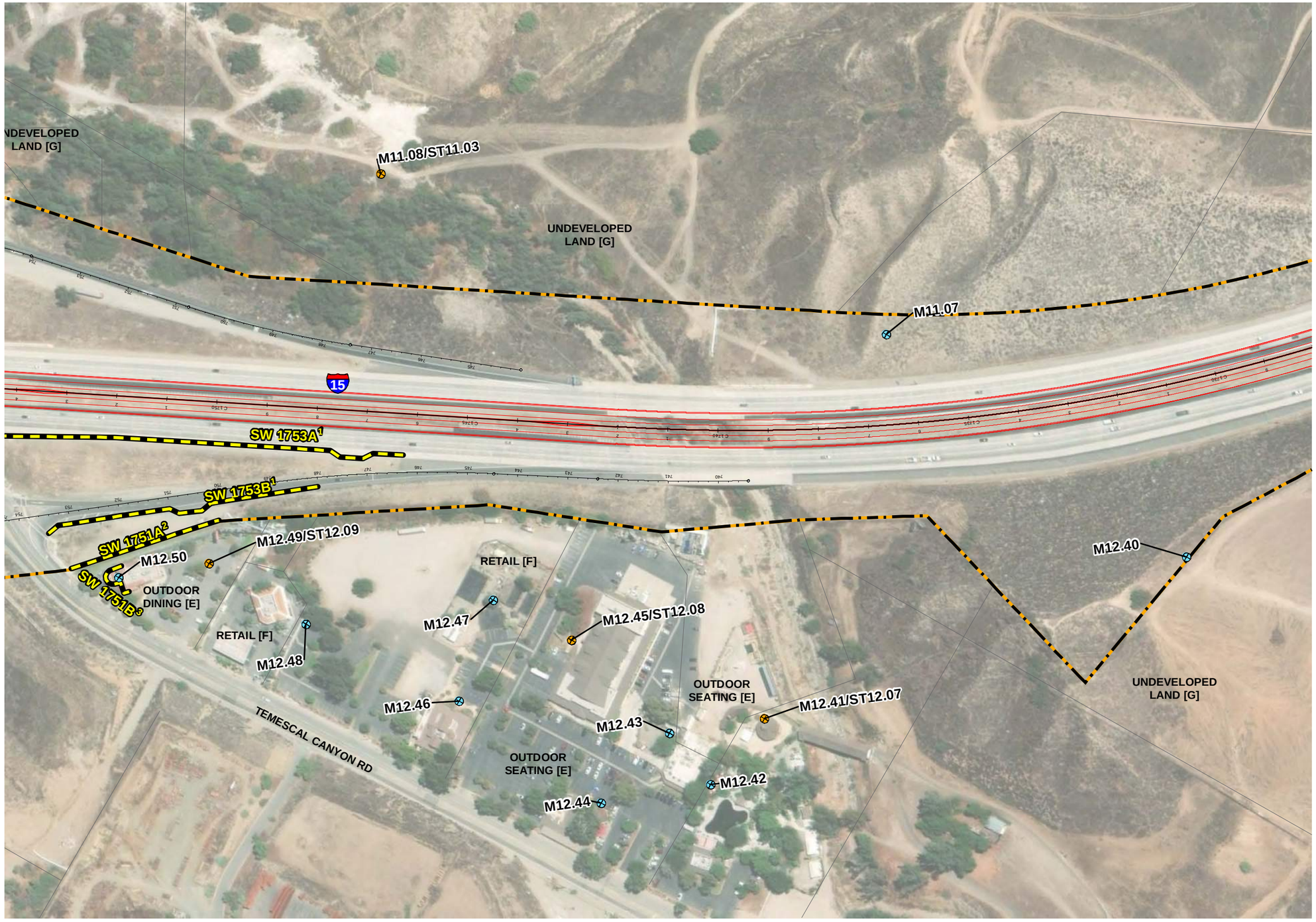
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 27 of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
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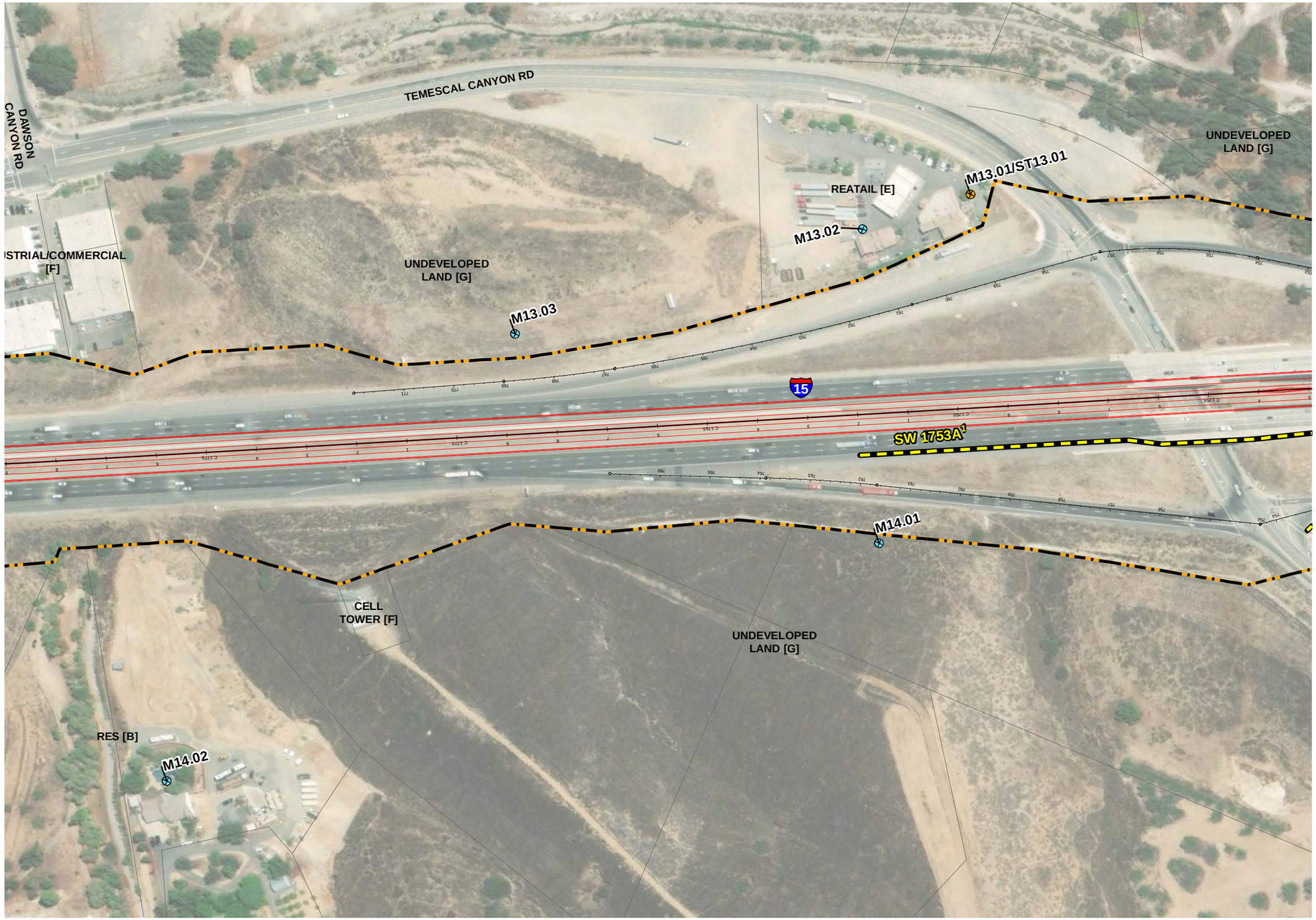
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 28a of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

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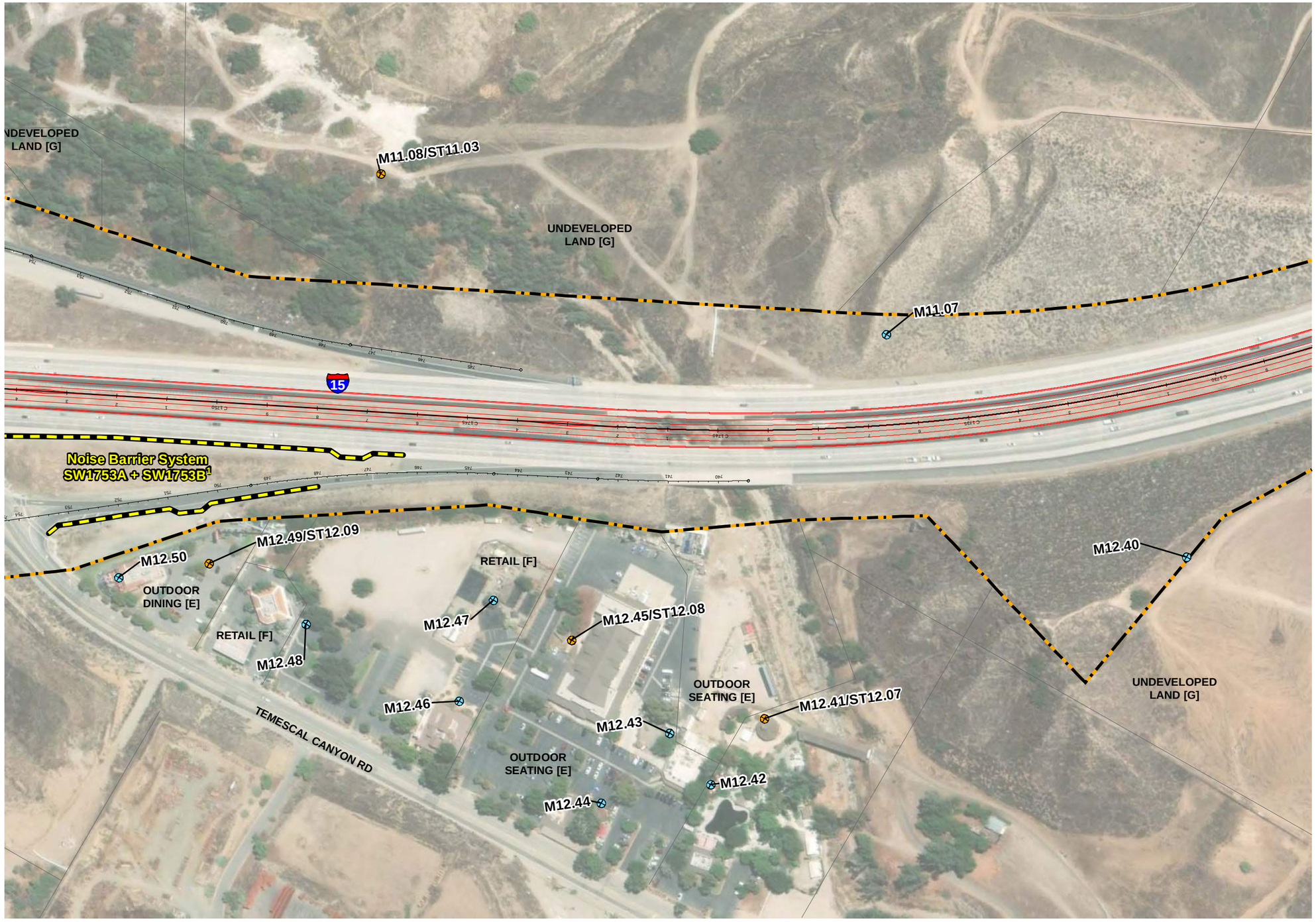
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 29a of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
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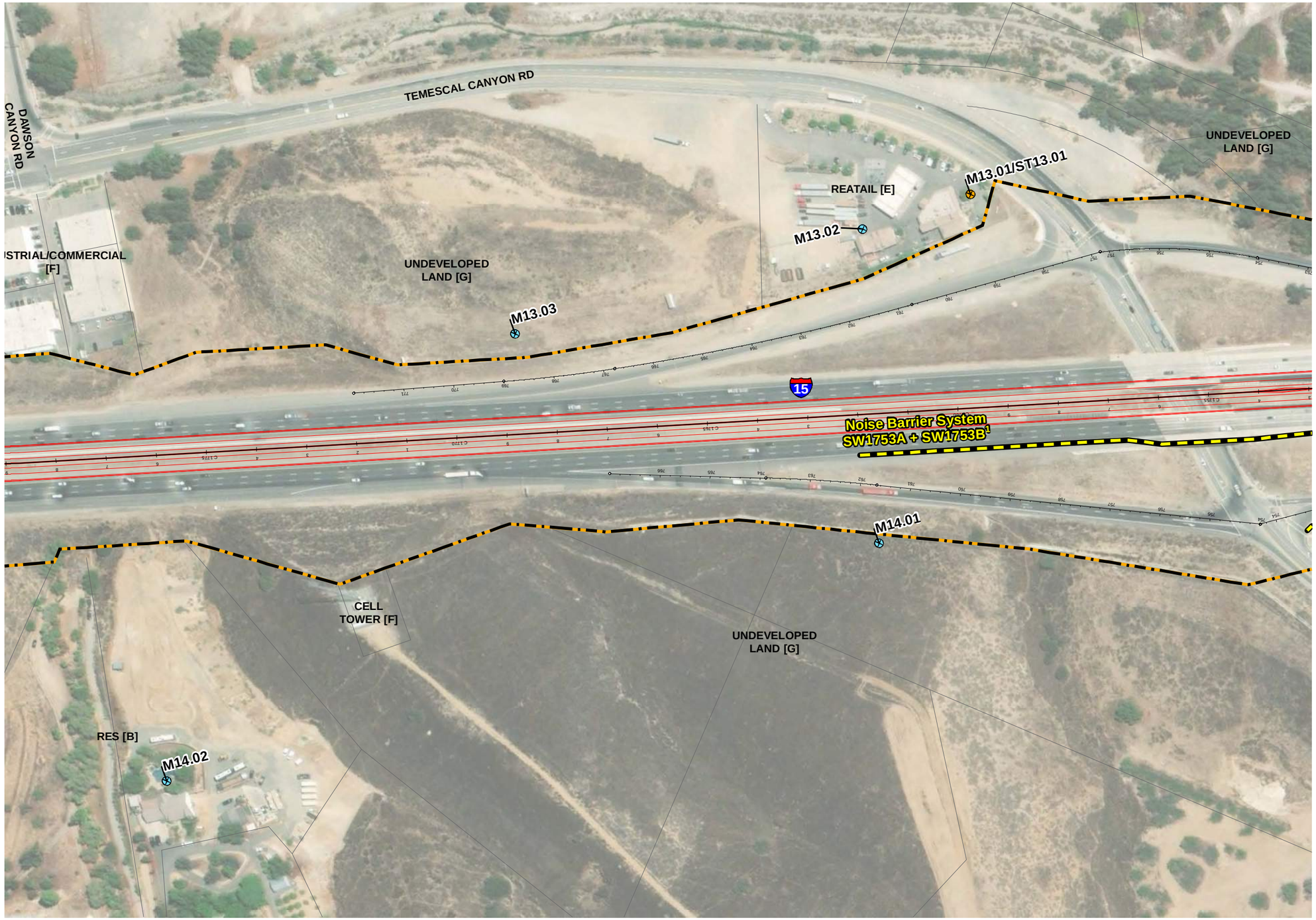
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 28b of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
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[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 29b of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension

Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

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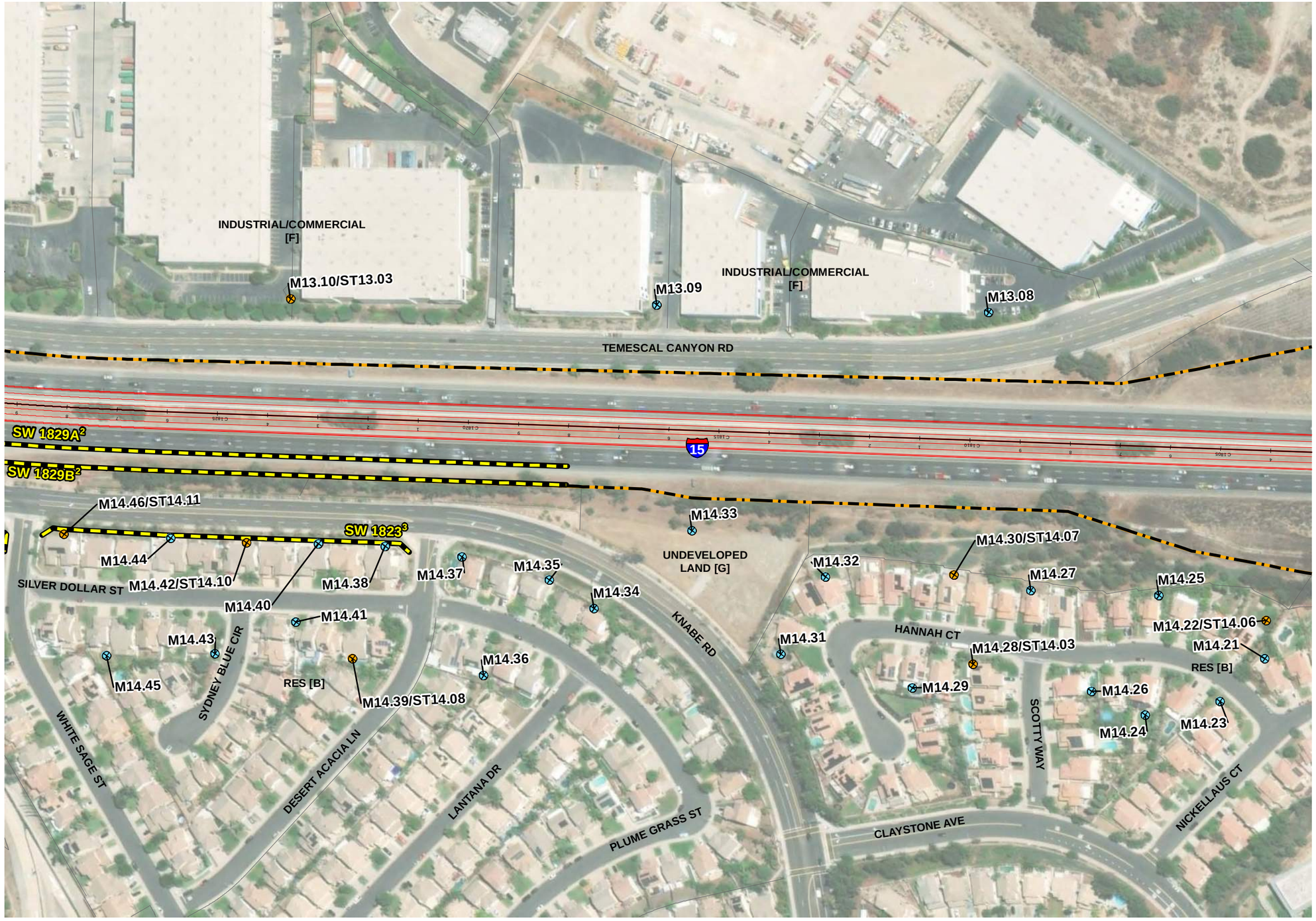
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 30 of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

[1] Not Acoustically Feasible

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[A] - Activity Category A Land Uses
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 31 of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension

Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

[1] Not Acoustically Feasible

[2] Acoustically Feasible but Failed to Meet Design Goal

[3] Acoustically Feasible and Met Design Goal

[A] - Activity Category A Land Uses
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 32 of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension

Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

[1] Not Acoustically Feasible

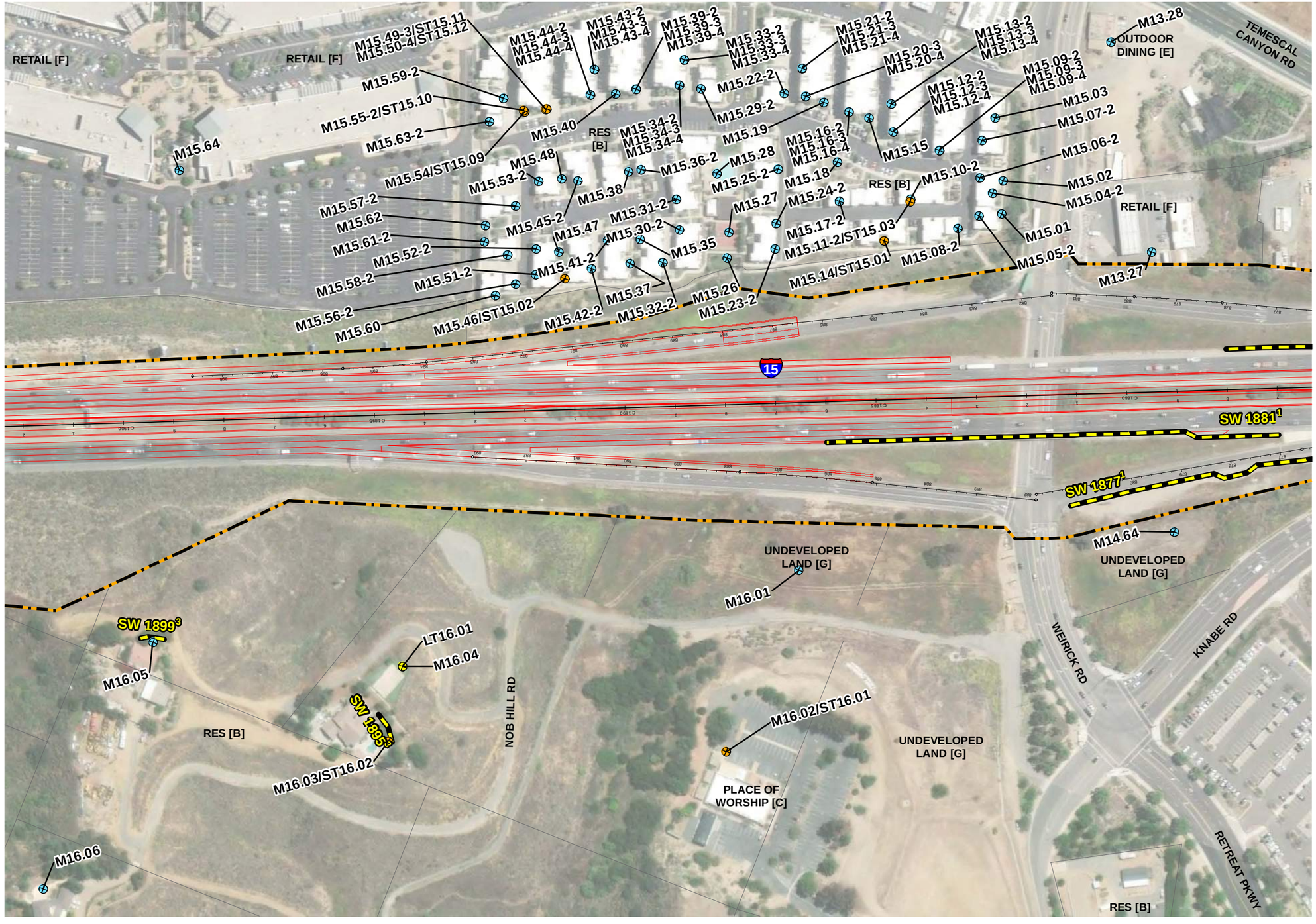
[2] Acoustically Feasible but Failed to Meet Design Goal

[3] Acoustically Feasible and Met Design Goal

[A] - Activity Category A Land Uses
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 33a of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
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[1] Not Acoustically Feasible

[2] Acoustically Feasible but Failed to Meet Design Goal

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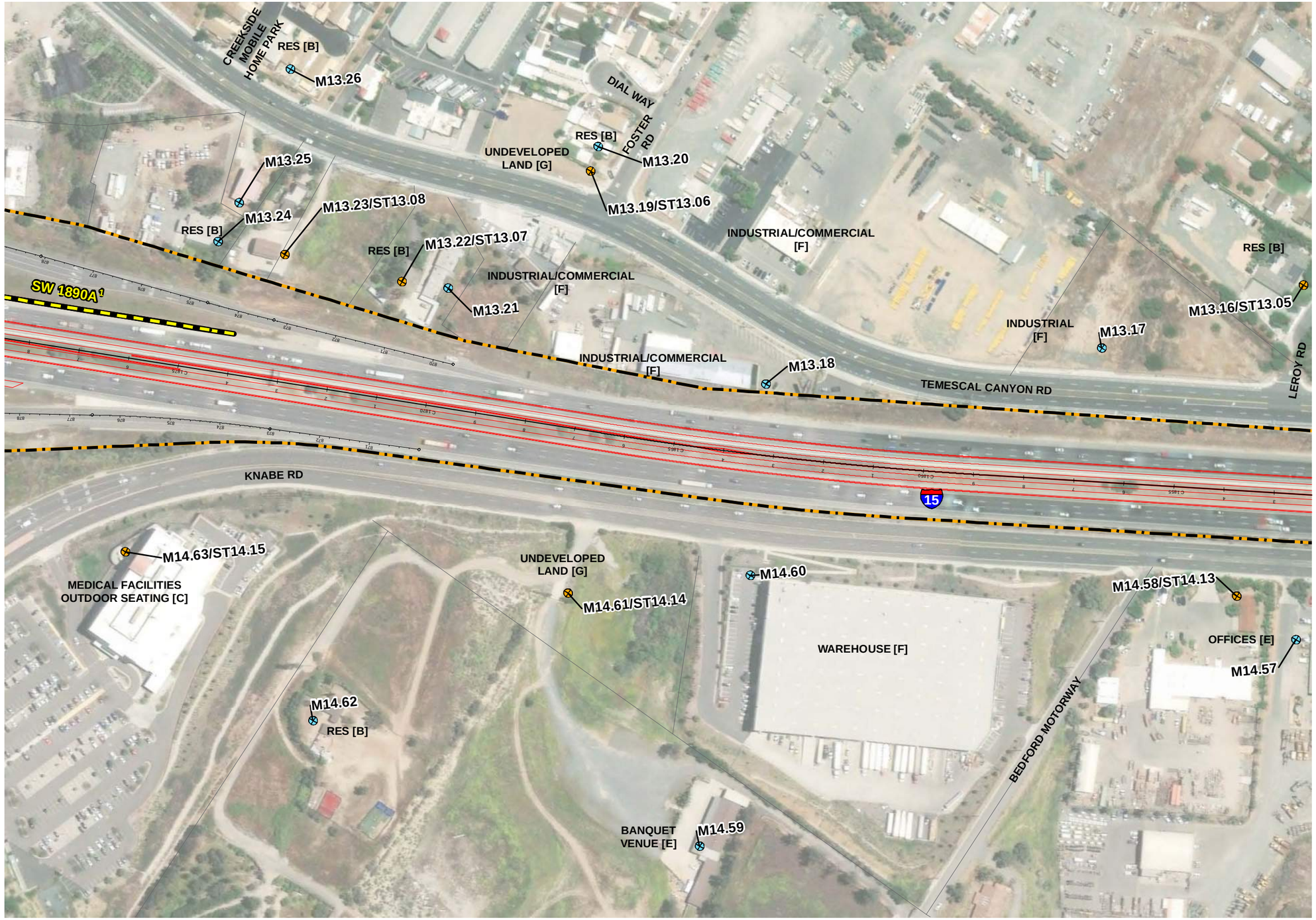
[A] - Activity Category A Land Uses
[B] - Activity Category B Land Uses
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 34a of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
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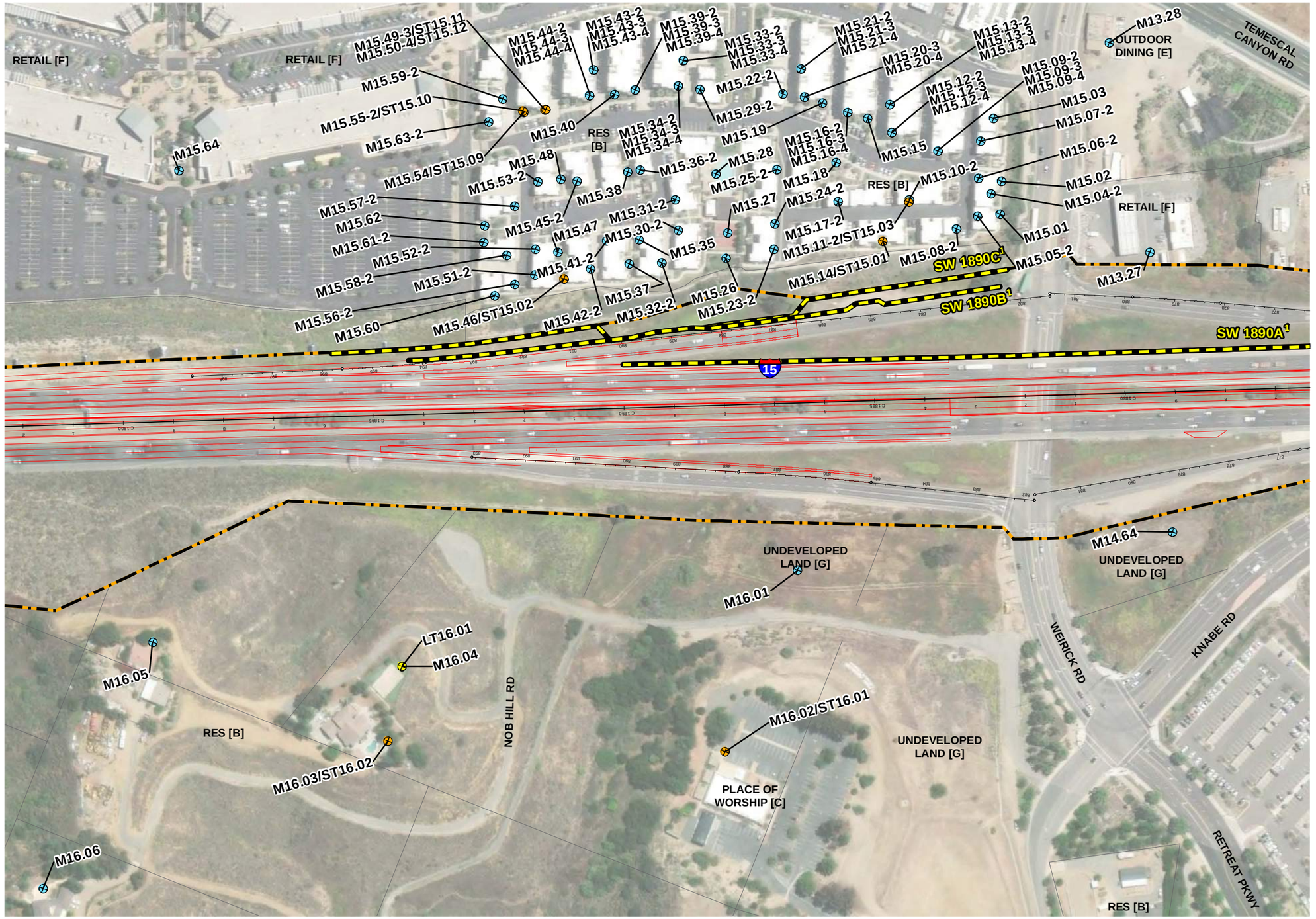
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 33b of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
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[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 34b of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension

Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
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[D] - Activity Category D Land Uses
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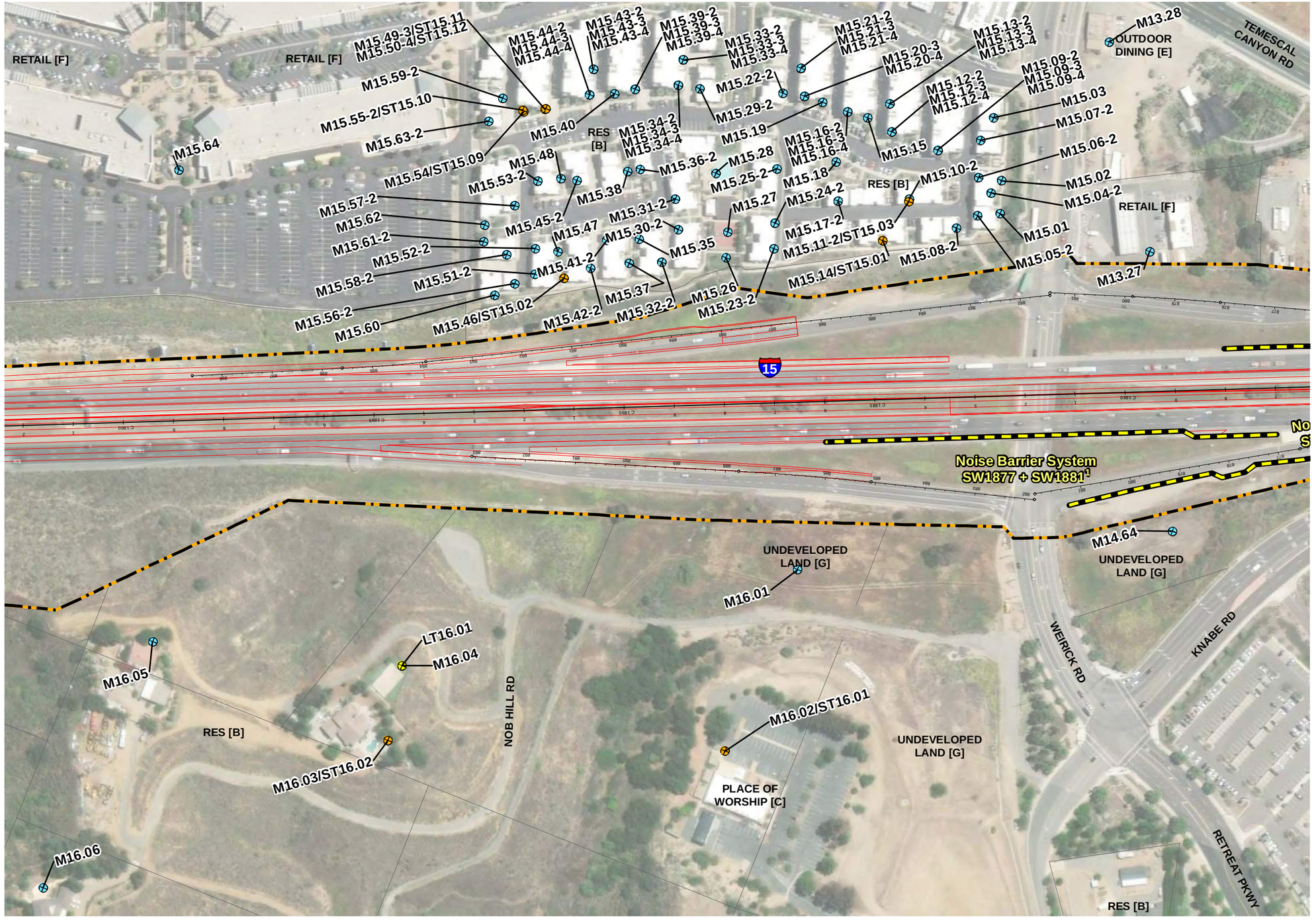
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 33c of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
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[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 34c of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension

Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
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[B] - Activity Category B Land Uses
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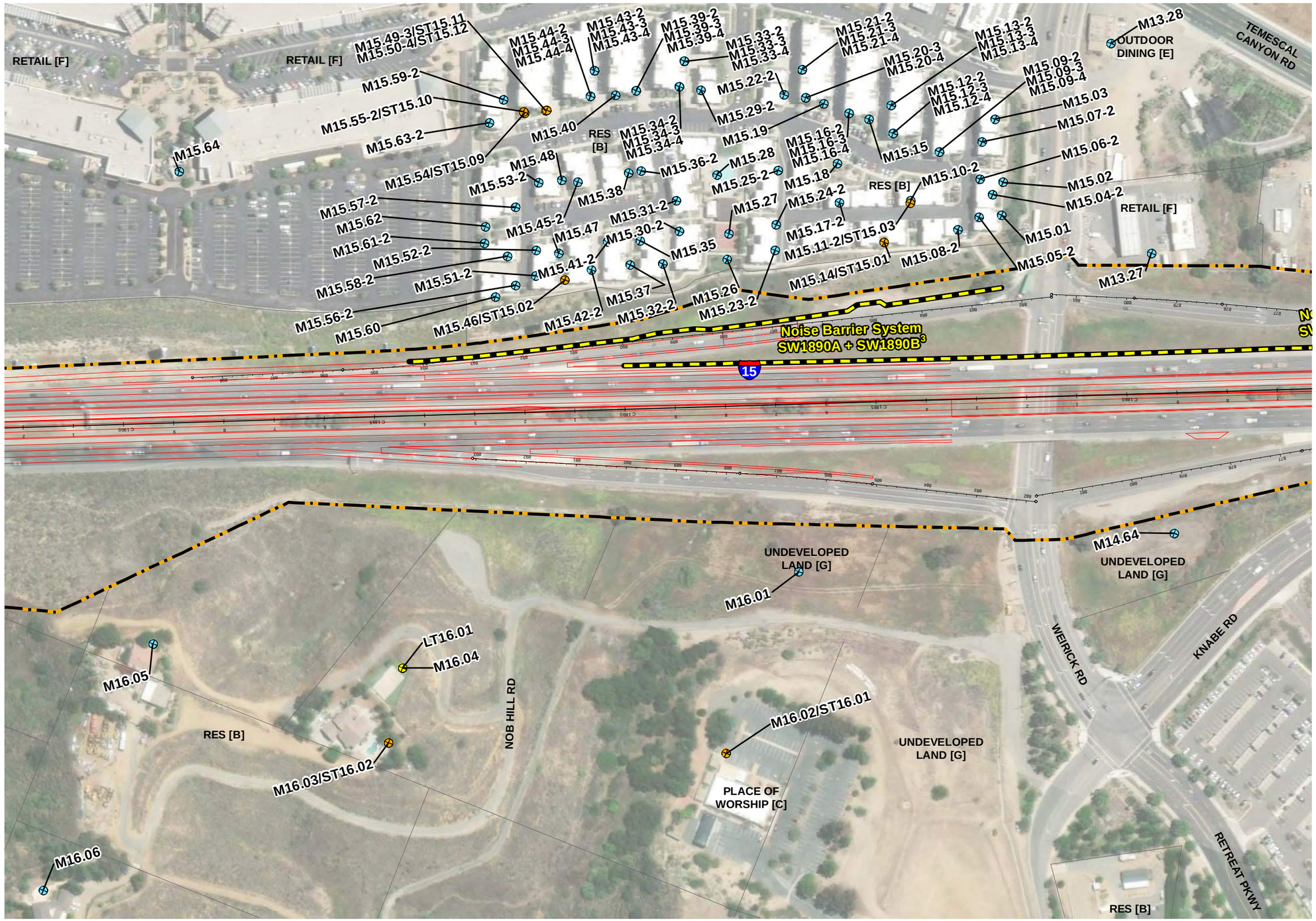
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 33d of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
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[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 34d of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension

Legend

- Long-term Measurement Location
- Short-term Measurement Location
- Modeled Receiver Location
- Evaluated Barrier Location
- Existing Barrier Location
- Project Layout
- Existing Right-of-Way (2008)
- Project Limits/Noise Study Limits
- Planned Future Projects
- Parcel Boundary

[1] Not Acoustically Feasible

[2] Acoustically Feasible but Failed to Meet Design Goal

[3] Acoustically Feasible and Met Design Goal

[A] - Activity Category A Land Uses
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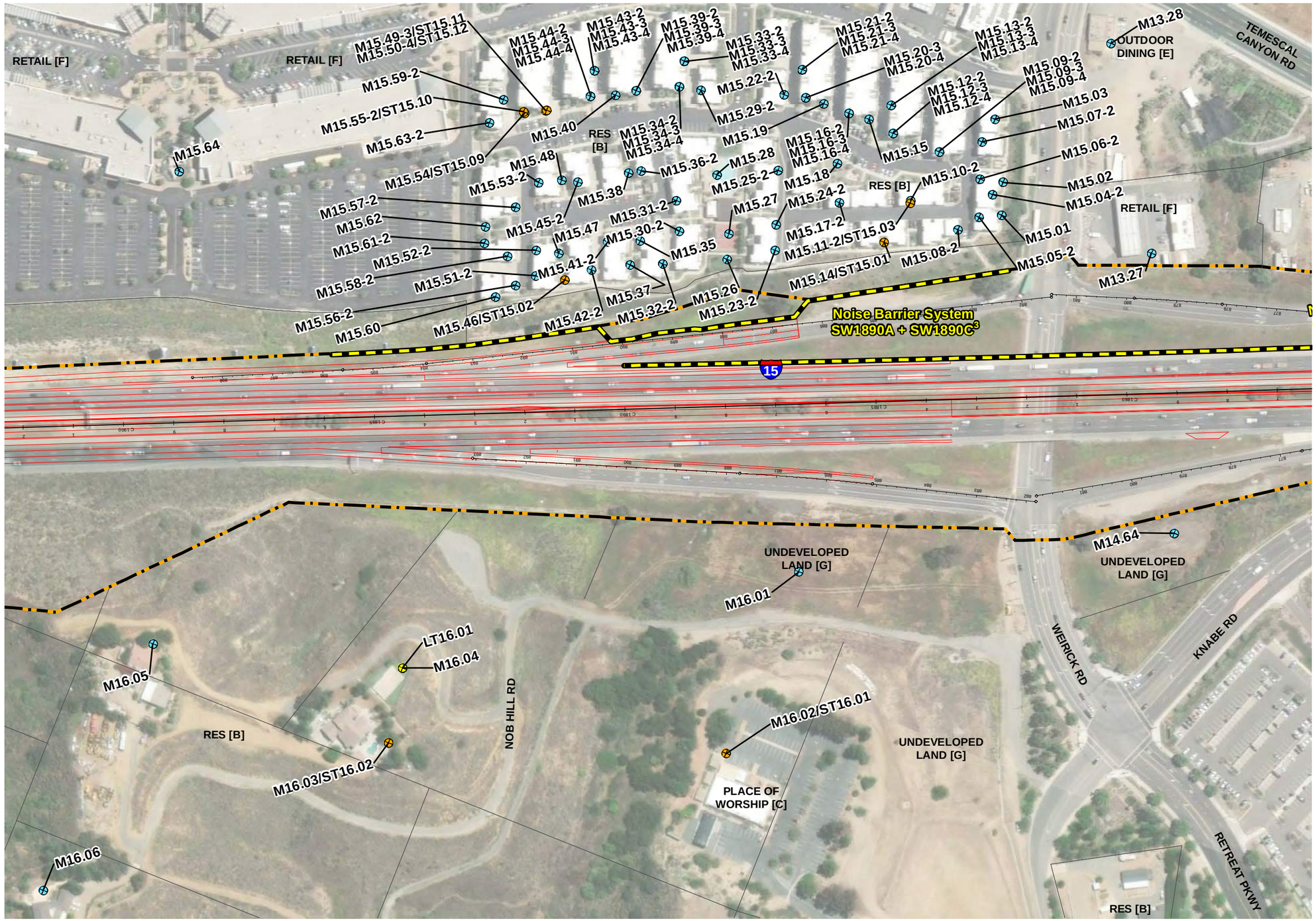
[C] - Activity Category C Land Uses
[D] - Activity Category D Land Uses
[E] - Activity Category E Land Uses
[F] - Activity Category F Land Uses
[G] - Activity Category G Land Uses

0 100 200 Feet
1:2,400

Figure 5-1, Sheet 33e of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

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- Short-term Measurement Location
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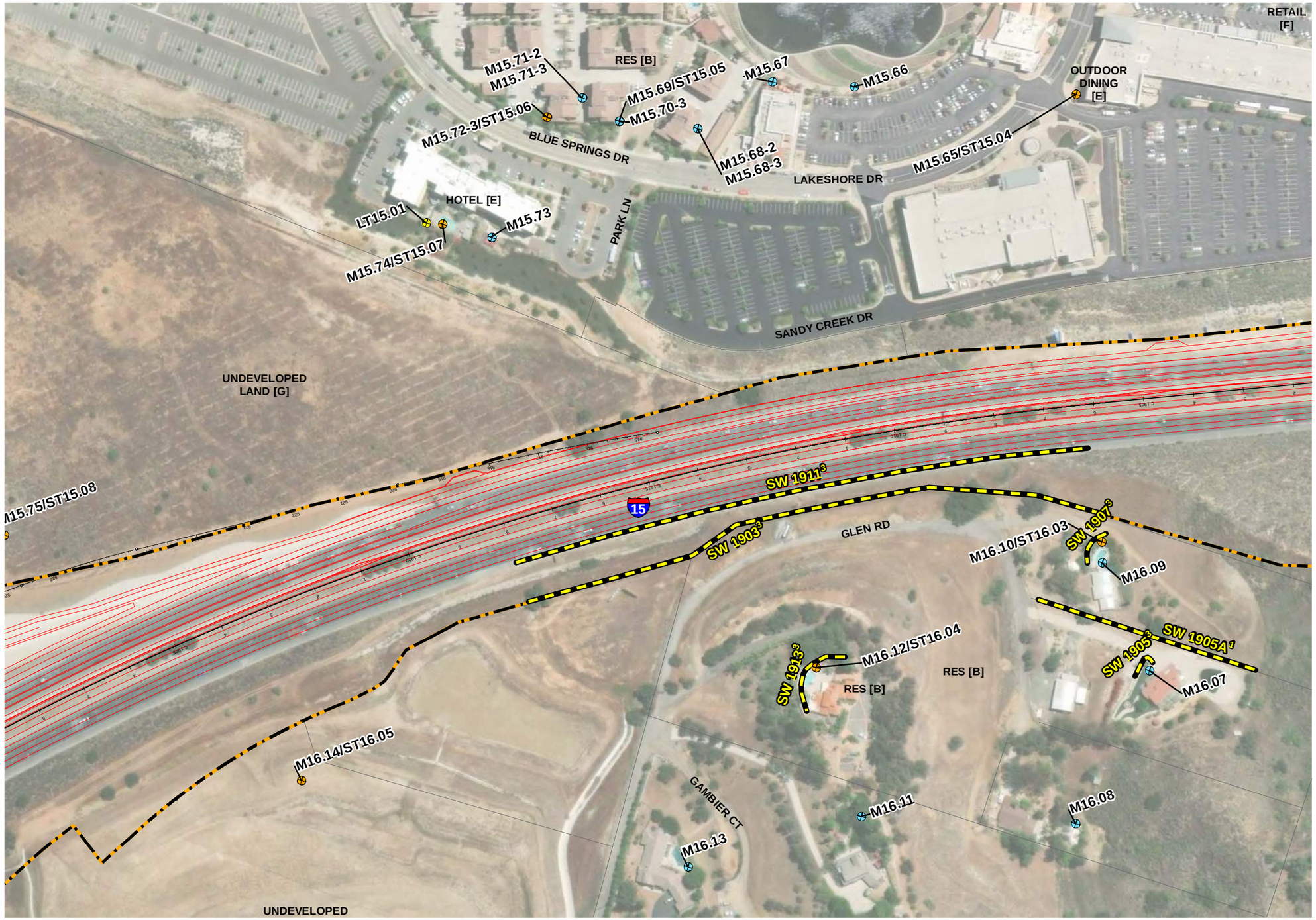
0 100 200 Feet
1:2,400

Figure 5-1, Sheet 34e of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

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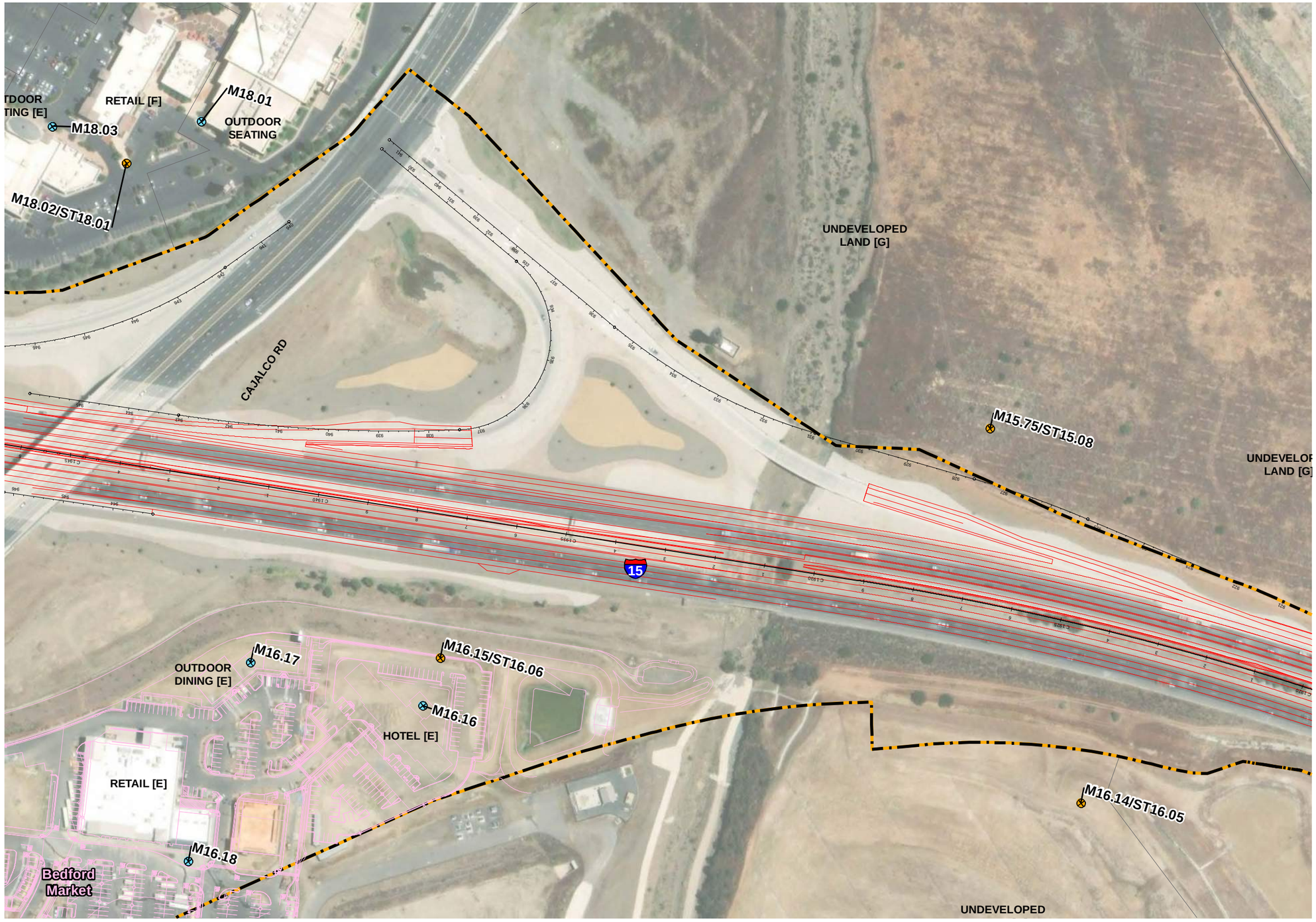
0 100 200 Feet
1:2,400

Figure 5-1, Sheet 35 of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension



Legend

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1:2,400

Figure 5-1, Sheet 36 of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension

Legend

- Long-term Measurement Location
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- Existing Right-of-Way (2008)
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0 100 200 Feet
1:2,400

Figure 5-1, Sheet 37 of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension

Legend

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0 100 200 Feet
1:2,400

Figure 5-1, Sheet 38a of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension

Legend

- Long-term Measurement Location
- Short-term Measurement Location
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0 100 200 Feet
1:2,400

Figure 5-1, Sheet 39a of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension

Legend

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- Modeled Receiver Location
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0 100 200 Feet
1:2,400

Figure 5-1, Sheet 38b of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension

Legend

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- Short-term Measurement Location
- Modeled Receiver Location
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0 100 200 Feet
1:2,400

Figure 5-1, Sheet 39b of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension

Legend

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0 100 200 Feet
1:2,400

Figure 5-1, Sheet 38c of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension

Legend

- Long-term Measurement Location
- Short-term Measurement Location
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1:2,400

Figure 5-1, Sheet 39c of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension

Legend

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0 100 200 Feet
1:2,400

Figure 5-1, Sheet 38d of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension

Legend

- Long-term Measurement Location
- Short-term Measurement Location
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0 100 200 Feet
1:2,400

Figure 5-1, Sheet 39d of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension

Legend

- Long-term Measurement Location
- Short-term Measurement Location
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0 100 200 Feet
1:2,400

Figure 5-1, Sheet 40 of 40
Noise Measurement and Modeling Locations, and Evaluated Noise Barriers
Interstate 15 Express Lanes Project Southern Extension

Appendix B

Predicted Future Noise Levels and Noise Barrier Analysis

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA

Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)

Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	6 feet L_{eq}(h)	6 feet I.L.	6 feet NBR	8 feet L_{eq}(h)	8 feet I.L.	8 feet NBR	10 feet L_{eq}(h)	10 feet I.L.	10 feet NBR	12 feet L_{eq}(h)	12 feet I.L.	12 feet NBR	14 feet L_{eq}(h)	14 feet I.L.	14 feet NBR	16 feet L_{eq}(h)	16 feet I.L.	16 feet NBR	18 feet L_{eq}(h)	18 feet I.L.	18 feet NBR	20 feet L_{eq}(h)	20 feet I.L.	20 feet NBR	Design Barrier L_{eq}(h)	Design Barrier I.L.	Design Barrier NBR
M01.01 / ST01.01	0 (ST01.01)	1		Undeveloped / G	--	N/A	75	76	76	1	0	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M01.02	0 (ST01.01)	1		Undeveloped / G	--	N/A	74	75	75	1	0	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M01.03 / ST01.02	0 (ST01.02)	1		Undeveloped / G	--	N/A	72	73	73	1	0	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M01.04	0 (ST01.02)	1	SW1142A - Mainline EOS	Industrial / commercial / E	1	29880 2nd St, Lake Elsinore, CA 92532	71	72	71	1	-1	0	E (72)	A/E	68	3	0	67	4	0	66	5	1	66	5	1	65	6	1	--	--	--	--	--	--	--	--	--	--	--	--
M01.05	0 (ST01.02)	1		Industrial / commercial / E	1	29850 2nd St, Lake Elsinore, CA 92532	66	68	68	2	0	2	E (72)	NONE	66	2	0	65	3	0	64	4	0	64	4	0	63	5	1	--	--	--	--	--	--	--	--	--	--	--	--
M01.04	0 (ST01.02)	1	SW1142B - ROW	Industrial / commercial / E	1	29880 2nd St, Lake Elsinore, CA 92532	71	72	71	1	-1	0	E (72)	A/E	71	0	0	70	1	0	68	3	0	67	4	0	66	5	1	65	6	1	65	6	1	64	7	1	64	7	1
M01.05	0 (ST01.02)	1		Industrial / commercial / E	1	29850 2nd St, Lake Elsinore, CA 92532	66	68	68	2	0	2	E (72)	NONE	68	0	0	67	1	0	66	2	0	65	3	0	64	4	0	64	4	0	63	5	1	63	5	1	63	5	1
M01.06	0 (ST01.02)	1		Industrial / F	--	29885 2nd St, Lake Elsinore, CA 92532	74	75	75	1	0	1	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M01.07	0 (ST01.03)	1		Undeveloped / G	--	N/A	59	61	60	2	-1	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M01.08 / ST01.03	0 (ST01.03)	1		Undeveloped / G	--	N/A	67	68	68	1	0	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M01.09	0 (ST01.03)	1		Undeveloped / G	--	N/A	63	65	64	2	-1	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M01.10 / ST01.04	0 (ST01.04)	1		Undeveloped / G	--	29615 3rd St, Lake Elsinore, CA 92532	66	67	67	1	0	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M01.11	0 (ST01.05)	1		Restaurant / E	1	18601 Dexter Ave, Lake Elsinore, CA 92532	64	66	65	2	-1	1	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M01.12	0 (ST01.05)	1		Restaurant outdoor dining / E	1	18492 Dexter Ave, Lake Elsinore, CA 92532	62	64	63	2	-1	1	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M01.13	0 (ST01.05)	1		Parking lot / F	--	18461 Dexter Ave, Lake Elsinore, CA 92532	68	69	69	1	0	1	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M01.14 / ST01.05	0 (ST01.05)	1		Restaurant / E	1	18461 Dexter Ave, Lake Elsinore, CA 92532	68	69	69	1	0	1	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M02.01	0 (ST02.01)	2	SW1109A - Mainline EOS	Residential / B	3	520 N Spring St, Lake Elsinore, CA 92530	58	59	58	1	-1	0	B (67)	NONE	58	0	0	58	0	0	58	0	0	58	0	0	58	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M02.02	0 (ST02.01)	2		Residential / B	1	131 W Minthorn St, Lake Elsinore, CA 92530	65	66	66	1	0	1	B (67)	A/E	65	1	0	64	2	0	63	3	0	63	3	0	63	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M02.01	0 (ST02.01)	2	SW1109B - Ramp EOS	Residential / B	3	520 N Spring St, Lake Elsinore, CA 92530	58	59	58	1	-1	0	B (67)	NONE	58	0	0	58	0	0	58	0	0	58	0	0	58	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M02.02	0 (ST02.01)	2		Residential / B	1	131 W Minthorn St, Lake Elsinore, CA 92530	65	66	66	1	0	1	B (67)	A/E	64	2	0	62	4	0	61	5	1	60	6	1	60	6	1	--	--	--	--	--	--	--	--	--	--	--	--
M02.01	0 (ST02.01)	2	SW1109A+B - Mainline & Ramp EOS	Residential / B	3	520 N Spring St, Lake Elsinore, CA 92530	58	59	58	1	-1	0	B (67)	NONE	58	0	0	58	0	0	58	0	0	58	0	0	58	0	0	--	--	--	--	--	--	--	--	--	58	0	0
M02.02	0 (ST02.01)	2		Residential / B	1	131 W Minthorn St, Lake Elsinore, CA 92530	65	66	66	1	0	1	B (67)	A/E	63	3	0	61	5	1	60	6	1	59	7	1	59	7	1	--	--	--	--	--	--	--	--	--	59	7	1

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA

Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR): 6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M02.03 / ST02.01	0 (ST02.01)	2		Driveway / F	--	131 W Minthorn St, Lake Elsinore, CA 92530	65	66	66	1	0	1	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M02.04	0 (ST02.01)	2		Industrial / F	--	N/A	64	62	62	-2	0	-2	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M02.05	0 (ST02.01)	2		Warehouse / F	--	403 W Minthorn St, Lake Elsinore, CA 92530	66	68	68	2	0	2	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M02.06	0 (ST02.02)	2		Offices / E	1	18785 Collier Ave, Lake Elsinore, CA 92530	68	69	69	1	0	1	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M02.07	0 (ST02.02)	2	SW1137A - Mainline EOS	Residential / B	1	18740 Collier Ave, Lake Elsinore, CA 92530	68	70	69	2	-1	1	B (67)	A/E	66	3	0	65	4	0	64	5	1	63	6	1	63	6	1	--	--	--	--	--	--	--	--	--	--	--	--
M02.07	0 (ST02.02)	2	SW1137B - Private Property	Residential / B	1	18740 Collier Ave, Lake Elsinore, CA 92530	68	70	69	2	-1	1	B (67)	A/E	68	1	0	66	3	0	65	4	0	64	5	1	63	6	1	62	7	1	--	--	--	--	--	--	62	7	1
M02.08 / ST02.02	0 (ST02.02)	2		Undeveloped / G	--	N/A	69	70	69	1	-1	0	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M02.09	0 (ST02.03)	2		Storage / F	--	18630 Collier Ave, Lake Elsinore, CA 92530	60	62	62	2	0	2	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M02.10	0 (ST02.03)	2	SW1151A - On Berm	Residential / B	1	18570 Collier Ave, Lake Elsinore, CA 92530	66	67	67	1	0	1	B (67)	A/E	67	0	0	66	1	0	66	1	0	66	1	0	66	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M02.11 / ST02.03	0 (ST02.03)	2		Residential / B	2	18574 Collier Ave, Lake Elsinore, CA 92530	67	68	68	1	0	1	B (67)	A/E	66	2	0	65	3	0	65	3	0	65	3	0	65	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M02.10	0 (ST02.03)	2	SW1151B - Mainline EOS	Residential / B	1	18570 Collier Ave, Lake Elsinore, CA 92530	66	67	67	1	0	1	B (67)	A/E	67	0	0	67	0	0	67	0	0	66	1	0	66	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M02.11 / ST02.03	0 (ST02.03)	2		Residential / B	2	18574 Collier Ave, Lake Elsinore, CA 92530	67	68	68	1	0	1	B (67)	A/E	67	1	0	67	1	0	67	1	0	66	2	0	66	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M02.10	0 (ST02.03)	2	SW1151C - Private Property	Residential / B	1	18570 Collier Ave, Lake Elsinore, CA 92530	66	67	67	1	0	1	B (67)	A/E	67	0	0	67	0	0	67	0	0	67	0	0	67	0	0	67	0	0	--	--	--	--	--	--	--	--	--
M02.11 / ST02.03	0 (ST02.03)	2		Residential / B	2	18574 Collier Ave, Lake Elsinore, CA 92530	67	68	68	1	0	1	B (67)	A/E	68	0	0	68	0	0	67	1	0	66	2	0	65	3	0	65	3	0	--	--	--	--	--	--	--	--	--
M02.12 / ST02.04	-4 (ST02.04)	2		Undeveloped / G	--	N/A	60	60	60	0	0	0	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M02.13	0 (ST02.05)	2		Honda Car Dealership / F	--	18450 Collier Ave, Lake Elsinore, CA 92530	63	63	62	0	-1	-1	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M02.14 / ST02.05	0 (ST02.05)	2		Restaurant outdoor dining / E	1	18310 Collier Ave suite a, Lake Elsinore, CA 92530	65	65	65	0	0	0	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M02.15	0 (ST02.05)	2		Restaurant outdoor dining / E	1	18310 Collier Ave suite a, Lake Elsinore, CA 92530	60	60	60	0	0	0	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M02.16	0 (ST02.05)	2		Restaurant outdoor dining / E	1	18300 Collier Ave, Lake Elsinore, CA 92530	63	63	63	0	0	0	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M02.17	0 (ST02.05)	2		Restaurant / E	1	18330 Collier Ave, Lake Elsinore, CA 92530	69	70	70	1	0	1	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M02.18	0 (ST02.05)	2		Offices / E	1	18330 Collier Ave, Lake Elsinore, CA 92530	66	67	66	1	-1	0	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - $L_{eq}(h)$, dBA																																												
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, $L_{eq}(h)$, dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																	
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR
M03.01 / ST03.01	0 (ST03.01)	3		Restaurant / E	1	18611 Dexter Ave, Lake Elsinore, CA 92532	69	70	70	1	0	1	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M03.02	0 (ST03.01)	3		Retail / F	--	29335 Central Ave, Lake Elsinore, CA 92532	70	72	72	2	0	2	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M03.03 / ST03.02	0 (ST03.02)	3		Restaurant outdoor dining / E	1	29315 Central Ave, Lake Elsinore, CA 92532	61	60	60	-1	0	-1	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M03.04	0 (ST03.04)	3		Undeveloped / G	--	N/A	68	68	68	0	0	0	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M03.05	0 (ST03.03)	3		Place of worship / C	1	18220 Dexter Ave, Lake Elsinore, CA 92532	62	64	64	2	0	2	C (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M03.05	0 (ST03.03)	3		Place of worship / D	1	18220 Dexter Ave, Lake Elsinore, CA 92532	42 #	44 #	44 #	2	0	2	D (52)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M03.06 / ST03.03	0 (ST03.03)	3		Parking Lot / F	--	18220 Dexter Ave, Lake Elsinore, CA 92532	66	68	67	2	-1	1	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M03.07	0 (ST03.04)	3		Residential / B	1	18193 Dexter Ave, Lake Elsinore, CA 92532	64	65	64	1	-1	0	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M03.08	0 (ST03.04)	3		Residential / B	1	29055 11th St, Lake Elsinore, CA 92532	64	62	62	-2	0	-2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M03.09	0 (ST03.04)	3		Residential / B	1	18187 Dexter Ave, Lake Elsinore, CA 92532	61	62	61	1	-1	0	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M03.10	0 (ST03.03)	3	SW1204 - Private Property	Residential / B	1	28913 11th St, Lake Elsinore, CA 92532	68	70	69	2	-1	1	B (67)	A/E	65	4	0	62	7	1	61	8	1	60	9	1	59	10	1	58	11	1	--	--	--	--	--	--	62	7	1
M03.11	0 (ST03.04)	3		Residential / B	1	18169 Dexter Ave, Lake Elsinore, CA 92532	63	61	61	-2	0	-2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M03.12	0 (ST03.04)	3		Residential / B	1	18159 Dexter Ave, Lake Elsinore, CA 92532	66	65	64	-1	-1	-2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M03.13 / ST03.04	0 (ST03.04)	3		Residential / B	--	18159 Dexter Ave, Lake Elsinore, CA 92532	66	67	66	1	-1	0	B (67)	N/A**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA																																													
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																	
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M03.14 / ST03.05	0 (ST03.05)	3	SW1226B - Between Mainline EOS and ROW	Residential / B	1	18095 Dexter Ave, Lake Elsinore, CA 92532	66	65	65	-1	0	-1	B (67)	NONE	65	0	0	65	0	0	65	0	0	65	0	0	65	0	0	--	--	--	--	--	--	--	--	--	65	0	0
M03.15	0 (ST03.05)	3		Residential / B	1	18085 Dexter Ave, Lake Elsinore, CA 92532	63	63	63	0	0	0	B (67)	NONE	62	1	0	62	1	0	62	1	0	61	2	0	61	2	0	--	--	--	--	--	--	--	--	--	61	2	0
M03.16	0 (ST03.03)	3		Residential / B	1	18080 Dexter Ave, Lake Elsinore, CA 92532	67	69	67	2	-2	0	B (67)	A/E	67	0	0	67	0	0	67	0	0	67	0	0	67	0	0	--	--	--	--	--	--	--	--	--	67	0	0
M03.17	0 (ST03.05)	3		Residential / B	1	18075 Dexter Ave, Lake Elsinore, CA 92532	66	67	67	1	0	1	B (67)	A/E	65	2	0	64	3	0	63	4	0	63	4	0	62	5	1	--	--	--	--	--	--	--	--	--	62	5	1
M03.18	0 (ST03.06)	3		Residential / B	1	18065 Dexter Ave, Lake Elsinore, CA 92532	64	65	65	1	0	1	B (67)	NONE	65	0	0	64	1	0	64	1	0	64	1	0	64	1	0	--	--	--	--	--	--	--	--	--	64	1	0
M03.19 / ST03.06	0 (ST03.06)	3		Residential / B	--	18055 Dexter Ave, Lake Elsinore, CA 92532	63	64	64	1	0	1	B (67)	N/A**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M03.20	0 (ST03.06)	3		Residential / B	1	18055 Dexter Ave, Lake Elsinore, CA 92532	62	63	62	1	-1	0	B (67)	NONE	62	0	0	62	0	0	62	0	0	61	1	0	61	1	0	--	--	--	--	--	--	--	--	--	61	1	0
M03.21	0 (ST03.06)	3		Residential / B	1	18045 Dexter Ave, Lake Elsinore, CA 92532	64	65	65	1	0	1	B (67)	NONE	64	1	0	63	2	0	62	3	0	62	3	0	61	4	0	--	--	--	--	--	--	--	--	--	61	4	0
M03.22	0 (ST03.06)	3		Residential / B	1	18035 Dexter Ave, Lake Elsinore, CA 92532	67	68	68	1	0	1	B (67)	A/E	67	1	0	65	3	0	64	4	0	63	5	1	62	6	1	--	--	--	--	--	--	--	--	--	62	6	1
M03.23 / ST03.07	0 (ST03.07)	3		Sports Field / C	3	28755 El Toro Rd, Lake Elsinore, CA 92532	72	73	73	1	0	1	C (67)	A/E	72	1	0	69	4	0	68	5	3	66	7	3	65	8	3	--	--	--	--	--	--	--	--	--	65	8	3
M03.24	0 (ST03.07)	3		Sports Field / C	3	28755 El Toro Rd, Lake Elsinore, CA 92532	69	70	71	1	1	2	C (67)	A/E	68	3	0	67	4	0	66	5	3	65	6	3	63	8	3	--	--	--	--	--	--	--	--	--	64	7	3
M03.25	0 (ST03.07)	3		Sports Field / C	1	28755 El Toro Rd, Lake Elsinore, CA 92532	74	74	75	0	1	1	C (67)	A/E	74	1	0	71	4	0	69	6	1	67	8	1	65	10	1	--	--	--	--	--	--	--	--	--	67	8	1
M03.26	0 (ST03.08)	3		Sports Field / C	1	28755 El Toro Rd, Lake Elsinore, CA 92532	74	74	75	0	1	1	C (67)	A/E	75	0	0	74	1	0	71	4	0	69	6	1	68	7	1	--	--	--	--	--	--	--	--	--	69	6	1
M03.27 / ST03.08	0 (ST03.08)	3		Sports Field / C	1	28755 El Toro Rd, Lake Elsinore, CA 92532	74	75	75	1	0	1	C (67)	A/E	75	0	0	75	0	0	73	2	0	71	4	0	69	6	1	--	--	--	--	--	--	--	--	--	70	5	1
M03.28	0 (ST03.08)	3		Park / C	1	N/A	69	68	70	-1	2	1	C (67)	A/E	68	2	0	67	3	0	66	4	0	66	4	0	65	5	1	--	--	--	--	--	--	--	--	--	65	5	1

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - $L_{eq}(h)$, dBA

Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, $L_{eq}(h)$, dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)
M03.14 / ST03.05	0 (ST03.05)	3	SW1208A - Between Mainline EOS and ROW	Residential / B	1	18095 Dexter Ave, Lake Elsinore, CA 92532	66	65	65	-1	0	-1	B (67)	NONE
M03.15	0 (ST03.05)	3		Residential / B	1	18085 Dexter Ave, Lake Elsinore, CA 92532	63	63	63	0	0	0	B (67)	NONE
M03.16	0 (ST03.03)	3		Residential / B	1	18080 Dexter Ave, Lake Elsinore, CA 92532	67	69	67	2	-2	0	B (67)	A/E
M03.17	0 (ST03.05)	3		Residential / B	1	18075 Dexter Ave, Lake Elsinore, CA 92532	66	67	67	1	0	1	B (67)	A/E
M03.18	0 (ST03.06)	3		Residential / B	1	18065 Dexter Ave, Lake Elsinore, CA 92532	64	65	65	1	0	1	B (67)	NONE
M03.20	0 (ST03.06)	3		Residential / B	1	18055 Dexter Ave, Lake Elsinore, CA 92532	62	63	62	1	-1	0	B (67)	NONE
M03.21	0 (ST03.06)	3		Residential / B	1	18045 Dexter Ave, Lake Elsinore, CA 92532	64	65	65	1	0	1	B (67)	NONE
M03.22	0 (ST03.06)	3		Residential / B	1	18035 Dexter Ave, Lake Elsinore, CA 92532	67	68	68	1	0	1	B (67)	A/E
M03.23 / ST03.07	0 (ST03.07)	3	SW1214A - Between Mainline EOS and ROW	Sports Field / C	3	28755 El Toro Rd, Lake Elsinore, CA 92532	72	73	73	1	0	1	C (67)	A/E
M03.24	0 (ST03.07)	3		Sports Field / C	3	28755 El Toro Rd, Lake Elsinore, CA 92532	69	70	71	1	1	2	C (67)	A/E
M03.25	0 (ST03.07)	3		Sports Field / C	1	28755 El Toro Rd, Lake Elsinore, CA 92532	74	74	75	0	1	1	C (67)	A/E
M03.26	0 (ST03.08)	3		Sports Field / C	1	28755 El Toro Rd, Lake Elsinore, CA 92532	74	74	75	0	1	1	C (67)	A/E
M03.27 / ST03.08	0 (ST03.08)	3		Sports Field / C	1	28755 El Toro Rd, Lake Elsinore, CA 92532	74	75	75	1	0	1	C (67)	A/E
M03.28	0 (ST03.08)	3		Park / C	1	N/A	69	68	70	-1	2	1	C (67)	A/E

Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)

Receiver I.D. / Measurement Location	6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR
M03.14 / ST03.05	64	1	0	63	2	0	63	2	0	63	2	0	62	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M03.15	62	1	0	61	2	0	60	3	0	60	3	0	60	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M03.16	67	0	0	67	0	0	67	0	0	67	0	0	67	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M03.17	65	2	0	64	3	0	63	4	0	62	5	1	62	5	1	--	--	--	--	--	--	--	--	--	--	--	--
M03.18	63	2	0	62	3	0	62	3	0	61	4	0	60	5	1	--	--	--	--	--	--	--	--	--	--	--	--
M03.20	62	0	0	61	1	0	60	2	0	60	2	0	59	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M03.21	65	0	0	63	2	0	63	2	0	62	3	0	62	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M03.22	67	1	0	65	3	0	64	4	0	64	4	0	63	5	1	--	--	--	--	--	--	--	--	--	--	--	--
M03.23 / ST03.07	72	1	0	70	3	0	68	5	3	67	6	3	66	7	3	--	--	--	--	--	--	--	--	--	67	6	3
M03.24	68	3	0	67	4	0	66	5	3	65	6	3	64	7	3	--	--	--	--	--	--	--	--	--	65	6	3
M03.25	74	1	0	71	4	0	69	6	1	67	8	1	65	10	1	--	--	--	--	--	--	--	--	--	67	8	1
M03.26	75	0	0	74	1	0	71	4	0	69	6	1	68	7	1	--	--	--	--	--	--	--	--	--	69	6	1
M03.27 / ST03.08	75	0	0	75	0	0	73	2	0	71	4	0	69	6	1	--	--	--	--	--	--	--	--	--	70	5	1
M03.28	68	2	0	67	3	0	66	4	0	66	4	0	65	5	1	--	--	--	--	--	--	--	--	--	65	5	1

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA																																													
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																		
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M03.14 / ST03.05	0 (ST03.05)	3	SW1226A - Mainline EOS	Residential / B	1	18095 Dexter Ave, Lake Elsinore, CA 92532	66	65	65	-1	0	-1	B (67)	NONE	65	0	0	65	0	0	65	0	0	65	0	0	65	0	0	--	--	--	--	--	--	--	--	--	65	0	0
M03.15	0 (ST03.05)	3		Residential / B	1	18085 Dexter Ave, Lake Elsinore, CA 92532	63	63	63	0	0	0	B (67)	NONE	62	1	0	62	1	0	61	2	0	61	2	0	61	2	0	--	--	--	--	--	--	--	--	--	61	2	0
M03.16	0 (ST03.03)	3		Residential / B	1	18080 Dexter Ave, Lake Elsinore, CA 92532	67	69	67	2	-2	0	B (67)	A/E	67	0	0	67	0	0	67	0	0	67	0	0	67	0	0	--	--	--	--	--	--	--	--	--	67	0	0
M03.17	0 (ST03.05)	3		Residential / B	1	18075 Dexter Ave, Lake Elsinore, CA 92532	66	67	67	1	0	1	B (67)	A/E	65	2	0	64	3	0	63	4	0	63	4	0	62	5	1	--	--	--	--	--	--	--	--	--	62	5	1
M03.18	0 (ST03.06)	3		Residential / B	1	18065 Dexter Ave, Lake Elsinore, CA 92532	64	65	65	1	0	1	B (67)	NONE	64	1	0	63	2	0	63	2	0	63	2	0	62	3	0	--	--	--	--	--	--	--	--	--	63	2	0
M03.20	0 (ST03.06)	3		Residential / B	1	18055 Dexter Ave, Lake Elsinore, CA 92532	62	63	62	1	-1	0	B (67)	NONE	62	0	0	62	0	0	61	1	0	61	1	0	61	1	0	--	--	--	--	--	--	--	--	--	61	1	0
M03.21	0 (ST03.06)	3		Residential / B	1	18045 Dexter Ave, Lake Elsinore, CA 92532	64	65	65	1	0	1	B (67)	NONE	63	2	0	62	3	0	62	3	0	61	4	0	61	4	0	--	--	--	--	--	--	--	--	--	61	4	0
M03.22	0 (ST03.06)	3		Residential / B	1	18035 Dexter Ave, Lake Elsinore, CA 92532	67	68	68	1	0	1	B (67)	A/E	65	3	0	64	4	0	63	5	1	62	6	1	61	7	1	--	--	--	--	--	--	--	--	--	62	6	1
M03.23 / ST03.07	0 (ST03.07)	3		Sports Field / C	3	28755 El Toro Rd, Lake Elsinore, CA 92532	72	73	73	1	0	1	C (67)	A/E	70	3	0	68	5	3	66	7	3	65	8	3	64	9	3	--	--	--	--	--	--	--	--	--	65	8	3
M03.24	0 (ST03.07)	3		Sports Field / C	3	28755 El Toro Rd, Lake Elsinore, CA 92532	69	70	71	1	1	2	C (67)	A/E	67	4	0	66	5	3	65	6	3	63	8	3	62	9	3	--	--	--	--	--	--	--	--	--	63	8	3
M03.25	0 (ST03.07)	3		Sports Field / C	1	28755 El Toro Rd, Lake Elsinore, CA 92532	74	74	75	0	1	1	C (67)	A/E	71	4	0	69	6	1	67	8	1	66	9	1	64	11	1	--	--	--	--	--	--	--	--	--	66	9	1
M03.26	0 (ST03.08)	3		Sports Field / C	1	28755 El Toro Rd, Lake Elsinore, CA 92532	74	74	75	0	1	1	C (67)	A/E	72	3	0	70	5	1	68	7	1	67	8	1	64	11	1	--	--	--	--	--	--	--	--	--	66	9	1
M03.27 / ST03.08	0 (ST03.08)	3		Sports Field / C	1	28755 El Toro Rd, Lake Elsinore, CA 92532	74	75	75	1	0	1	C (67)	A/E	73	2	0	71	4	0	70	5	1	68	7	1	66	9	1	--	--	--	--	--	--	--	--	--	67	8	1
M03.28	0 (ST03.08)	3		Park / C	1	N/A	69	68	70	-1	2	1	C (67)	A/E	67	3	0	66	4	0	66	4	0	66	4	0	65	5	1	--	--	--	--	--	--	--	--	--	65	5	1

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA																																													
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																	
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M03.14 / ST03.05	0 (ST03.05)	3	SW1208C - Mainline EOS	Residential / B	1	18095 Dexter Ave, Lake Elsinore, CA 92532	66	65	65	-1	0	-1	B (67)	NONE	64	1	0	63	2	0	62	3	0	63	2	0	62	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M03.15	0 (ST03.05)	3		Residential / B	1	18085 Dexter Ave, Lake Elsinore, CA 92532	63	63	63	0	0	0	B (67)	NONE	61	2	0	61	2	0	60	3	0	60	3	0	60	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M03.16	0 (ST03.03)	3		Residential / B	1	18080 Dexter Ave, Lake Elsinore, CA 92532	67	69	67	2	-2	0	B (67)	A/E	67	0	0	67	0	0	67	0	0	67	0	0	67	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M03.17	0 (ST03.05)	3		Residential / B	1	18075 Dexter Ave, Lake Elsinore, CA 92532	66	67	67	1	0	1	B (67)	A/E	65	2	0	63	4	0	62	5	1	62	5	1	61	6	1	--	--	--	--	--	--	--	--	--	--	--	--
M03.18	0 (ST03.06)	3		Residential / B	1	18065 Dexter Ave, Lake Elsinore, CA 92532	64	65	65	1	0	1	B (67)	NONE	63	2	0	62	3	0	61	4	0	61	4	0	60	5	1	--	--	--	--	--	--	--	--	--	--	--	--
M03.20	0 (ST03.06)	3		Residential / B	1	18055 Dexter Ave, Lake Elsinore, CA 92532	62	63	62	1	-1	0	B (67)	NONE	61	1	0	61	1	0	60	2	0	59	3	0	59	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M03.21	0 (ST03.06)	3		Residential / B	1	18045 Dexter Ave, Lake Elsinore, CA 92532	64	65	65	1	0	1	B (67)	NONE	63	2	0	62	3	0	62	3	0	61	4	0	61	4	0	--	--	--	--	--	--	--	--	--	--	--	--
M03.22	0 (ST03.06)	3		Residential / B	1	18035 Dexter Ave, Lake Elsinore, CA 92532	67	68	68	1	0	1	B (67)	A/E	65	3	0	64	4	0	63	5	1	63	5	1	62	6	1	--	--	--	--	--	--	--	--	--	--	--	--
M03.23 / ST03.07	0 (ST03.07)	3	SW1214C - Mainline EOS	Sports Field / C	3	28755 El Toro Rd, Lake Elsinore, CA 92532	72	73	73	1	0	1	C (67)	A/E	70	3	0	69	4	0	67	6	3	66	7	3	65	8	3	--	--	--	--	--	--	--	--	--	67	6	3
M03.24	0 (ST03.07)	3		Sports Field / C	3	28755 El Toro Rd, Lake Elsinore, CA 92532	69	70	71	1	1	2	C (67)	A/E	67	4	0	66	5	3	65	6	3	64	7	3	63	8	3	--	--	--	--	--	--	--	--	--	65	6	3
M03.25	0 (ST03.07)	3		Sports Field / C	1	28755 El Toro Rd, Lake Elsinore, CA 92532	74	74	75	0	1	1	C (67)	A/E	71	4	0	69	6	1	67	8	1	66	9	1	64	11	1	--	--	--	--	--	--	--	--	--	67	8	1
M03.26	0 (ST03.08)	3		Sports Field / C	1	28755 El Toro Rd, Lake Elsinore, CA 92532	74	74	75	0	1	1	C (67)	A/E	72	3	0	70	5	1	68	7	1	67	8	1	64	11	1	--	--	--	--	--	--	--	--	--	68	7	1
M03.27 / ST03.08	0 (ST03.08)	3		Sports Field / C	1	28755 El Toro Rd, Lake Elsinore, CA 92532	74	75	75	1	0	1	C (67)	A/E	73	2	0	71	4	0	70	5	1	68	7	1	66	9	1	--	--	--	--	--	--	--	--	--	69	6	1
M03.28	0 (ST03.08)	3		Park / C	1	N/A	69	68	70	-1	2	1	C (67)	A/E	67	3	0	66	4	0	66	4	0	66	4	0	65	5	1	--	--	--	--	--	--	--	--	--	65	5	1

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - $L_{eq}(h)$, dBA

Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, $L_{eq}(h)$, dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)
M03.14 / ST03.05	0 (ST03.05)	3	SW1226C - ROW	Residential / B	1	18095 Dexter Ave, Lake Elsinore, CA 92532	66	65	65	-1	0	-1	B (67)	NONE
M03.15	0 (ST03.05)	3		Residential / B	1	18085 Dexter Ave, Lake Elsinore, CA 92532	63	63	63	0	0	0	B (67)	NONE
M03.16	0 (ST03.03)	3		Residential / B	1	18080 Dexter Ave, Lake Elsinore, CA 92532	67	69	67	2	-2	0	B (67)	A/E
M03.17	0 (ST03.05)	3		Residential / B	1	18075 Dexter Ave, Lake Elsinore, CA 92532	66	67	67	1	0	1	B (67)	A/E
M03.18	0 (ST03.06)	3		Residential / B	1	18065 Dexter Ave, Lake Elsinore, CA 92532	64	65	65	1	0	1	B (67)	NONE
M03.20	0 (ST03.06)	3		Residential / B	1	18055 Dexter Ave, Lake Elsinore, CA 92532	62	63	62	1	-1	0	B (67)	NONE
M03.21	0 (ST03.06)	3		Residential / B	1	18045 Dexter Ave, Lake Elsinore, CA 92532	64	65	65	1	0	1	B (67)	NONE
M03.22	0 (ST03.06)	3		Residential / B	1	18035 Dexter Ave, Lake Elsinore, CA 92532	67	68	68	1	0	1	B (67)	A/E
M03.23 / ST03.07	0 (ST03.07)	3		Sports Field / C	3	28755 El Toro Rd, Lake Elsinore, CA 92532	72	73	73	1	0	1	C (67)	A/E
M03.24	0 (ST03.07)	3		Sports Field / C	3	28755 El Toro Rd, Lake Elsinore, CA 92532	69	70	71	1	1	2	C (67)	A/E
M03.25	0 (ST03.07)	3		Sports Field / C	1	28755 El Toro Rd, Lake Elsinore, CA 92532	74	74	75	0	1	1	C (67)	A/E
M03.26	0 (ST03.08)	3		Sports Field / C	1	28755 El Toro Rd, Lake Elsinore, CA 92532	74	74	75	0	1	1	C (67)	A/E
M03.27 / ST03.08	0 (ST03.08)	3		Sports Field / C	1	28755 El Toro Rd, Lake Elsinore, CA 92532	74	75	75	1	0	1	C (67)	A/E
M03.28	0 (ST03.08)	3		Park / C	1	N/A	69	68	70	-1	2	1	C (67)	A/E

Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)

Receiver I.D. / Measurement Location	6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR
M03.14 / ST03.05	65	0	0	65	0	0	65	0	0	65	0	0	65	0	0	65	0	0	65	0	0	65	0	0	65	0	0
M03.15	63	0	0	63	0	0	62	1	0	62	1	0	62	1	0	61	2	0	61	2	0	61	2	0	61	2	0
M03.16	67	0	0	67	0	0	67	0	0	67	0	0	67	0	0	67	0	0	67	0	0	67	0	0	67	0	0
M03.17	67	0	0	67	0	0	67	0	0	66	1	0	65	2	0	64	3	0	63	4	0	62	5	1	62	5	1
M03.18	64	1	0	64	1	0	64	1	0	64	1	0	63	2	0	62	3	0	61	4	0	61	4	0	61	4	0
M03.20	62	0	0	62	0	0	62	0	0	61	1	0	61	1	0	60	2	0	60	2	0	59	3	0	59	3	0
M03.21	64	1	0	63	2	0	63	2	0	62	3	0	62	3	0	61	4	0	61	4	0	61	4	0	61	4	0
M03.22	66	2	0	65	3	0	64	4	0	63	5	1	62	6	1	61	7	1	61	7	1	61	7	1	61	7	1
M03.23 / ST03.07	71	2	0	69	4	0	68	5	3	66	7	3	64	9	3	63	10	3	62	11	3	62	11	3	62	11	3
M03.24	68	3	0	68	3	0	66	5	3	65	6	3	64	7	3	63	8	3	62	9	3	61	10	3	62	9	3
M03.25	75	0	0	75	0	0	75	0	0	74	1	0	74	1	0	73	2	0	72	3	0	69	6	1	70	5	1
M03.26	75	0	0	75	0	0	75	0	0	75	0	0	74	1	0	72	3	0	70	5	1	68	7	1	70	5	1
M03.27 / ST03.08	75	0	0	75	0	0	75	0	0	75	0	0	75	0	0	75	0	0	74	1	0	73	2	0	74	1	0
M03.28	70	0	0	70	0	0	70	0	0	69	1	0	68	2	0	66	4	0	66	4	0	65	5	1	65	5	1

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA																																													
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																	
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M03.14 / ST03.05	0 (ST03.05)	3	SW1208D - ROW	Residential / B	1	18095 Dexter Ave, Lake Elsinore, CA 92532	66	65	65	-1	0	-1	B (67)	NONE	64	1	0	63	2	0	63	2	0	63	2	0	63	2	0	62	3	0	62	3	0	62	3	0	62	3	0
M03.15	0 (ST03.05)	3		Residential / B	1	18085 Dexter Ave, Lake Elsinore, CA 92532	63	63	63	0	0	0	B (67)	NONE	63	0	0	62	1	0	61	2	0	61	2	0	60	3	0	60	3	0	60	3	0	59	4	0	60	3	0
M03.16	0 (ST03.03)	3		Residential / B	1	18080 Dexter Ave, Lake Elsinore, CA 92532	67	69	67	2	-2	0	B (67)	A/E	67	0	0	67	0	0	67	0	0	67	0	0	67	0	0	67	0	0	67	0	0	67	0	0	67	0	0
M03.17	0 (ST03.05)	3		Residential / B	1	18075 Dexter Ave, Lake Elsinore, CA 92532	66	67	67	1	0	1	B (67)	A/E	67	0	0	67	0	0	67	0	0	66	1	0	65	2	0	63	4	0	62	5	1	62	5	1	62	5	1
M03.18	0 (ST03.06)	3		Residential / B	1	18065 Dexter Ave, Lake Elsinore, CA 92532	64	65	65	1	0	1	B (67)	NONE	64	1	0	64	1	0	64	1	0	64	1	0	63	2	0	62	3	0	61	4	0	61	4	0	61	4	0
M03.20	0 (ST03.06)	3		Residential / B	1	18055 Dexter Ave, Lake Elsinore, CA 92532	62	63	62	1	-1	0	B (67)	NONE	62	0	0	62	0	0	61	1	0	61	1	0	60	2	0	60	2	0	59	3	0	59	3	0	59	3	0
M03.21	0 (ST03.06)	3		Residential / B	1	18045 Dexter Ave, Lake Elsinore, CA 92532	64	65	65	1	0	1	B (67)	NONE	64	1	0	64	1	0	63	2	0	62	3	0	62	3	0	61	4	0	61	4	0	61	4	0	61	4	0
M03.22	0 (ST03.06)	3		Residential / B	1	18035 Dexter Ave, Lake Elsinore, CA 92532	67	68	68	1	0	1	B (67)	A/E	66	2	0	65	3	0	64	4	0	63	5	1	63	5	1	62	6	1	62	6	1	61	7	1	61	7	1
M03.23 / ST03.07	0 (ST03.07)	3	SW1214D - ROW	Sports Field / C	3	28755 El Toro Rd, Lake Elsinore, CA 92532	72	73	73	1	0	1	C (67)	A/E	71	2	0	69	4	0	68	5	3	66	7	3	65	8	3	64	9	3	63	10	3	62	11	3	65	8	3
M03.24	0 (ST03.07)	3		Sports Field / C	3	28755 El Toro Rd, Lake Elsinore, CA 92532	69	70	71	1	1	2	C (67)	A/E	68	3	0	68	3	0	66	5	3	65	6	3	64	7	3	63	8	3	62	9	3	62	9	3	63	8	3
M03.25	0 (ST03.07)	3		Sports Field / C	1	28755 El Toro Rd, Lake Elsinore, CA 92532	74	74	75	0	1	1	C (67)	A/E	75	0	0	75	0	0	75	0	0	74	1	0	74	1	0	73	2	0	72	3	0	69	6	1	70	5	1
M03.26	0 (ST03.08)	3		Sports Field / C	1	28755 El Toro Rd, Lake Elsinore, CA 92532	74	74	75	0	1	1	C (67)	A/E	75	0	0	75	0	0	75	0	0	75	0	0	74	1	0	72	3	0	70	5	1	68	7	1	70	5	1
M03.27 / ST03.08	0 (ST03.08)	3		Sports Field / C	1	28755 El Toro Rd, Lake Elsinore, CA 92532	74	75	75	1	0	1	C (67)	A/E	75	0	0	75	0	0	75	0	0	75	0	0	75	0	0	75	0	0	74	1	0	73	2	0	74	1	0
M03.28	0 (ST03.08)	3		Park / C	1	N/A	69	68	70	-1	2	1	C (67)	A/E	70	0	0	70	0	0	70	0	0	69	1	0	68	2	0	66	4	0	66	4	0	65	5	1	65	5	1
M03.14 / ST03.05	0 (ST03.05)	3	SW1208B - Private Property	Residential / B	1	18095 Dexter Ave, Lake Elsinore, CA 92532	66	65	65	-1	0	-1	B (67)	NONE	63	2	0	62	3	0	61	4	0	59	6	1	59	6	1	58	7	1	--	--	--	--	--	--	60	5	1
M03.15	0 (ST03.05)	3		Residential / B	1	18085 Dexter Ave, Lake Elsinore, CA 92532	63	63	63	0	0	0	B (67)	NONE	62	1	0	61	2	0	60	3	0	59	4	0	59	4	0	59	4	0	--	--	--	--	--	--	60	3	0
M03.16	0 (ST03.03)	3		Residential / B	1	18080 Dexter Ave, Lake Elsinore, CA 92532	67	69	67	2	-2	0	B (67)	A/E	67	0	0	67	0	0	67	0	0	67	0	0	67	0	0	67	0	0	--	--	--	--	--	--	67	0	0
M03.17	0 (ST03.05)	3		Residential / B	1	18075 Dexter Ave, Lake Elsinore, CA 92532	66	67	67	1	0	1	B (67)	A/E	63	4	0	61	6	1	61	6	1	60	7	1	59	8	1	59	8	1	--	--	--	--	--	--	60	7	1

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - $L_{eq}(h)$, dBA																																												
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, $L_{eq}(h)$, dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																	
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR
M03.18	0 (ST03.06)	3	SW1212 - Private Property	Residential / B	1	18065 Dexter Ave, Lake Elsinore, CA 92532	64	65	65	1	0	1	B (67)	NONE	63	2	0	62	3	0	61	4	0	61	4	0	60	5	1	60	5	1	--	--	--	--	--	--	60	5	1
M03.20	0 (ST03.06)	3		Residential / B	1	18055 Dexter Ave, Lake Elsinore, CA 92532	62	63	62	1	-1	0	B (67)	NONE	62	0	0	61	1	0	60	2	0	60	2	0	59	3	0	59	3	0	--	--	--	--	--	--	59	3	0
M03.21	0 (ST03.06)	3		Residential / B	1	18045 Dexter Ave, Lake Elsinore, CA 92532	64	65	65	1	0	1	B (67)	NONE	63	2	0	62	3	0	61	4	0	61	4	0	60	5	1	60	5	1	--	--	--	--	--	--	60	5	1
M03.22	0 (ST03.06)	3		Residential / B	1	18035 Dexter Ave, Lake Elsinore, CA 92532	67	68	68	1	0	1	B (67)	A/E	63	5	1	62	6	1	62	6	1	61	7	1	60	8	1	60	8	1	--	--	--	--	--	--	61	7	1
M03.23 / ST03.07	0 (ST03.07)	3	SW1214B - Private Property	Sports Field / C	3	28755 El Toro Rd, Lake Elsinore, CA 92532	72	73	73	1	0	1	C (67)	A/E	66	7	3	65	8	3	64	9	3	63	10	3	62	11	3	61	12	3	--	--	--	--	--	--	66	7	3
M03.24	0 (ST03.07)	3		Sports Field / C	3	28755 El Toro Rd, Lake Elsinore, CA 92532	69	70	71	1	1	2	C (67)	A/E	65	6	3	63	8	3	63	8	3	62	9	3	62	9	3	61	10	3	--	--	--	--	--	--	65	6	3
M03.25	0 (ST03.07)	3		Sports Field / C	1	28755 El Toro Rd, Lake Elsinore, CA 92532	74	74	75	0	1	1	C (67)	A/E	75	0	0	70	5	1	67	8	1	64	11	1	63	12	1	62	13	1	--	--	--	--	--	--	70	5	1
M03.26	0 (ST03.08)	3		Sports Field / C	1	28755 El Toro Rd, Lake Elsinore, CA 92532	74	74	75	0	1	1	C (67)	A/E	66	9	1	65	10	1	63	12	1	62	13	1	61	14	1	60	15	1	--	--	--	--	--	--	66	9	1
M03.27 / ST03.08	0 (ST03.08)	3		Sports Field / C	1	28755 El Toro Rd, Lake Elsinore, CA 92532	74	75	75	1	0	1	C (67)	A/E	67	8	1	65	10	1	64	11	1	62	13	1	61	14	1	60	15	1	--	--	--	--	--	--	67	8	1
M03.28	0 (ST03.08)	3	SW1238 - Private Property	Park / C	1	N/A	69	68	70	-1	2	1	C (67)	A/E	65	5	1	64	6	1	63	7	1	62	8	1	62	8	1	62	8	1	--	--	--	--	--	--	63	7	1
M03.16	0 (ST03.03)	3	SW1210 - Private property	Residential / B	1	18080 Dexter Ave, Lake Elsinore, CA 92532	67	69	67	2	-2	0	B (67)	A/E	62	5	1	61	6	1	60	7	1	59	8	1	59	8	1	59	8	1	--	--	--	--	--	--	60	7	1
M03.29	0 (ST03.08)	3		Utility / F	1	N/A	70	70	71	0	1	1	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M03.30	0 (ST03.08)	3		Residential / B	3	N/A	65	60	60	-5	0	-5	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M03.31	0 (ST03.08)	3		Residential / B	2	N/A	62	57	58	-5	1	-4	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M03.32	0 (ST03.08)	3		Residential / B	2	N/A	60	55	56	-5	1	-4	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M03.33	0 (ST03.08)	3		Residential / B	2	N/A	58	54	54	-4	0	-4	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M03.34	0 (ST03.08)	3		Residential / B	2	N/A	57	52	53	-5	1	-4	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M03.35	0 (ST03.08)	3		Residential / B	3	N/A	55	51	52	-4	1	-3	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M03.36 / ST03.09	-4 (ST03.09)	3		Undelveloped / G	--	N/A	61	64	65	3	1	4	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M04.01	0 (ST04.01)	4		Retail / F	--	18282 Collier Ave, Lake Elsinore, CA 92530	65	66	66	1	0	1	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M04.02 / ST04.01	0 (ST04.01)	4		Cemetery / C	1	18170 Collier Ave, Lake Elsinore, CA 92530	69	68	69	-1	1	0	C (67)	N/A**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M04.03	0 (ST04.01)	4		Cemetery / C	1	18170 Collier Ave, Lake Elsinore, CA 92530	61	62	62	1	0	1	C (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - $L_{eq}(h)$, dBA																																													
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, $L_{eq}(h)$, dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																		
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR
M04.04	0 (ST04.01)	4		Undeveloped / G	--	18170 Collier Ave, Lake Elsinore, CA 92530	68	70	70	2	0	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M04.05 / ST04.02	0 (ST04.02)	4		Undeveloped / G	--	29033 El Toro Rd, Lake Elsinore, CA 92530	63	63	64	0	1	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M04.06	0 (ST04.03)	4		Outdoor seating / E	1	17600 Collier Ave, Lake Elsinore, CA 92530	59	60	59	1	-1	0	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M04.07 / ST04.03	0 (ST04.03)	4		Outdoor dining / E	1	17600 Collier Ave, Lake Elsinore, CA 92530	57	58	58	1	0	1	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M04.08	0 (ST04.04)	4		Outdoor seating / E	1	17600 Collier Ave, Lake Elsinore, CA 92530	57	58	58	1	0	1	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M04.09 / ST04.04	0 (ST04.04)	4		Outdoor seating / E	1	17600 Collier Ave, Lake Elsinore, CA 92530	62	63	64	1	1	2	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M04.10	0 (ST04.05)	4		Outdoor seating / E	1	17600 Collier Ave, Lake Elsinore, CA 92530	58	58	59	0	1	1	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M04.11 / ST04.05	0 (ST04.05)	4		Outdoor seating / E	1	17600 Collier Ave, Lake Elsinore, CA 92530	60	60	60	0	0	0	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M04.12 / ST04.06	0 (ST04.06)	4		Undeveloped / G	--	N/A	65	65	65	0	0	0	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M04.13	0 (ST04.06)	4		Retail / F	--	19930 Collier Ave, Lake Elsinore, CA 92530	63	64	64	1	0	1	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M05.01 / ST05.01	0 (ST05.01)	5		Agricultural / F	--	10000 Nichols Rd, Lake Elsinore, CA 92532	72	73	73	1	0	1	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M05.02	0 (ST05.01)	5		Undeveloped / G	--	N/A	71	72	72	1	0	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M05.03	0 (ST05.02)	5		Undeveloped / G	--	N/A	76	77	78	1	1	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M05.04	0 (ST05.02)	5		Undeveloped / G	--	N/A	75	76	77	1	1	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M05.05 / ST05.02	0 (ST05.02)	5		Undeveloped / G	--	N/A	73	73	74	0	1	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M05.06	0 (ST05.02)	5		Undeveloped / G	--	N/A	67	68	69	1	1	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M05.07	-4 (ST05.03)	5		Undeveloped / G	--	N/A	62	63	63	1	0	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M05.08	-4 (ST05.03)	5		Undeveloped / G	--	N/A	69	70	71	1	1	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M05.09 / ST05.03	-4 (ST05.03)	5		Cell Tower / F	--	N/A	66	67	68	1	1	2	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M05.10	-4 (ST05.03)	5		Undeveloped / G	--	N/A	69	69	71	0	2	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M05.11	-4 (ST05.03)	5		Undeveloped / G	--	N/A	71	72	73	1	1	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M05.12	-4 (ST05.04)	5		Undeveloped / G	--	N/A	70	71	72	1	1	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M05.13 / ST05.04	-4 (ST05.04)	5		Undeveloped / G	--	N/A	60	60	61	0	1	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA

Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																										
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M06.01 / ST06.01	0 (ST06.01)	6		Undeveloped / G	--	N/A	62	63	63	1	0	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M06.02	0 (ST06.01)	6		Undeveloped / G	--	N/A	65	65	66	0	1	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M06.03	0 (ST06.02)	6		Undeveloped / G	--	N/A	67	68	68	1	0	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M06.04 / ST06.02	0 (ST06.02)	6		Undeveloped / G	--	N/A	67	67	67	0	0	0	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M06.05	0 (ST06.02)	6		Undeveloped / G	--	N/A	69	70	70	1	0	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M06.06 / ST06.03	0 (ST06.03)	6		Utility / F	--	N/A	66	67	67	1	0	1	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M06.07	0 (ST06.04)	6		Undeveloped / G	--	N/A	67	67	68	0	1	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M06.08 / ST06.04	0 (ST06.04)	6		Undeveloped / G	--	N/A	73	73	74	0	1	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M06.09	0 (ST06.04)	6		Industrial / F	--	N/A	67	68	69	1	1	2	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M07.01	0 (ST07.01)	7		Undeveloped / G	--	N/A	75	76	77	1	1	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M07.02 / ST07.01	0 (ST07.01)	7		Industrial / F	--	14900 Concordia Ranch Rd, Lake Elsinore, CA 92530	68	69	71	1	2	3	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M07.03	0 (ST07.01)	7		Undeveloped / G	--	N/A	70	71	71	1	0	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M07.04	0 (ST07.02)	7		Industrial / F	--	N/A	69	70	71	1	1	2	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M07.05 / ST07.02	0 (ST07.02)	7		Undeveloped / G	--	N/A	73	74	75	1	1	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M07.06	0 (ST07.03)	7		Undeveloped / G	--	N/A	66	65	66	-1	1	0	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M07.07 / ST07.03	0 (ST07.03)	7		Undeveloped / G	--	N/A	65	66	66	1	0	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M07.08	0 (ST07.03)	7		Industrial / F	--	26382 Earthmover Cir, Corona, CA 92883	64	65	65	1	0	1	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M07.09 / ST07.04	0 (ST07.04)	7		Sidewalk / F	--	26333 Lester Cir, Corona, CA 92883	62	63	63	1	0	1	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M07.10	0 (ST07.05)	7		Industrial / F	--	13181 Temescal Canyon Rd, Corona, CA 92883	61	62	63	1	1	2	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M07.11 / ST07.05	0 (ST07.05)	7		Office / E	1	12869 Temescal Canyon Rd STE B, Corona, CA 92883	59	60	61	1	1	2	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M07.12 / ST07.06	-4 (ST07.06)	7		Undeveloped / G	--	N/A	63	64	64	1	0	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M07.13	-4 (ST07.07)	7		Industrial-warehouse / F	--	12250 Temescal Canyon Rd, Corona, CA 92883	63	64	65	1	1	2	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M07.14 / ST07.07	-4 (ST07.07)	7		Cell Tower / F	--	N/A	61	62	63	1	1	2	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - $L_{eq}(h)$, dBA																																												
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, $L_{eq}(h)$, dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																	
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR
M07.15 / ST07.08	-4 (ST07.08)	7		Undeveloped / G	--	N/A	56	58	58	2	0	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M08.01 / ST08.01	0 (ST08.01)	8		Undeveloped / G	--	N/A	62	62	63	0	1	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M08.02	0 (ST08.01)	8		Undeveloped / G	--	N/A	71	68	68	-3	0	-3	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M08.03	-4 (ST08.02)	8		Undeveloped / G	--	N/A	66	65	65	-1	0	-1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M08.04 / ST08.02	-4 (ST08.02)	8		Undeveloped / G	--	N/A	65	66	66	1	0	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M08.05	0 (ST08.03)	8		Storage / F	--	N/A	68	68	68	0	0	0	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M08.06	0 (ST08.03)	8		Storage / F	--	N/A	68	64	65	-4	1	-3	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M08.07 / ST08.03	0 (ST08.03)	8		Industrial / F	--	N/A	69	71	70	2	-1	1	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M08.08 / ST08.04	-4 (ST08.04)	8		Residential / B	2	26678 Hostettler Rd, Corona, CA 92883	63	63	63	0	0	0	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M08.09	-4 (ST08.04)	8		Undeveloped / G	--	N/A	60	60	60	0	0	0	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M08.10 / ST08.05	0 (ST08.05)	8		Undeveloped / G	--	N/A	67	68	68	1	0	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M08.11	0 (ST08.05)	8		Undeveloped / G	--	N/A	64	65	65	1	0	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M08.12	0 (ST08.06)	8		Undeveloped / G	--	N/A	73	74	75	1	1	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M08.13	0 (ST08.06)	8		Undeveloped / G	--	N/A	74	75	76	1	1	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA

Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																										
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M08.14 / ST08.06	0 (ST08.06)	8	SW1521A - Mainline EOS	Residential / B	1	26320 Horsethief Canyon Rd, Corona, CA 92883	69	70	70	1	0	1	B (67)	A/E	68	2	0	67	3	0	67	3	0	67	3	0	65	5	1	--	--	--	--	--	--	--	--	--	--	--	--
M08.14 / ST08.06	0 (ST08.06)	8	SW1521B - ROW	Residential / B	1	26320 Horsethief Canyon Rd, Corona, CA 92883	69	70	70	1	0	1	B (67)	A/E	70	0	0	70	0	0	70	0	0	69	1	0	68	2	0	68	2	0	68	2	0	67	3	0	--	--	--
M08.14 / ST08.06	0 (ST08.06)	8	SW1521C - Private Property	Residential / B	1	26320 Horsethief Canyon Rd, Corona, CA 92883	69	70	70	1	0	1	B (67)	A/E	70	0	0	67	3	0	65	5	1	64	6	1	64	6	1	63	7	1	--	--	--	--	--	--	63	7	1
M08.15	0 (ST08.07)	8		Undeveloped / G	--	N/A	70	72	72	2	0	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M08.16 / ST08.07	0 (ST08.07)	8	SW1539 A - Mainline EOS	Residential / B	1	13005 De Palma Rd, Corona, CA 92883	68	69	70	1	1	2	B (67)	A/E	67	3	0	66	4	0	66	4	0	65	5	1	64	6	1	--	--	--	--	--	--	--	--	--	--	--	--
M08.16 / ST08.07	0 (ST08.07)	8	SW1539B - ROW	Residential / B	1	13005 De Palma Rd, Corona, CA 92883	68	69	70	1	1	2	B (67)	A/E	68	2	0	68	2	0	67	3	0	67	3	0	66	4	0	66	4	0	66	4	0	66	4	0	--	--	--
M08.16 / ST08.07	0 (ST08.07)	8	SW1539 C - Private Property	Residential / B	1	13005 De Palma Rd, Corona, CA 92883	68	69	70	1	1	2	B (67)	A/E	70	0	0	69	1	0	67	3	0	66	4	0	65	5	1	64	6	1	--	--	--	--	--	--	--	--	--
M08.17	0 (ST08.07)	8		Undeveloped / G	--	N/A	74	75	75	1	0	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M08.18	0 (ST08.08)	8		Undeveloped / G	--	N/A	75	77	77	2	0	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M08.19 / ST08.08	0 (ST08.08)	8		Undeveloped / G	--	N/A	72	74	74	2	0	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M08.20	0 (ST08.09)	8		Undeveloped / G	--	N/A	73	75	75	2	0	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M08.21 / ST08.09	0 (ST08.09)	8		RV Storage / F	--	25999 Glen Eden Rd, Corona, CA 92883	60	62	63	2	1	3	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M08.22	0 (ST08.09)	8		Undeveloped / G	--	N/A	70	71	72	1	1	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M08.23	0 (ST08.09)	8		Undeveloped / G	--	N/A	70	71	72	1	1	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M08.24 / ST08.10	0 (ST08.10)	8		Outdoor dining / E	1	11882 De Palma Rd, Corona, CA 92883	65	66	67	1	1	2	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M08.25	-4 (ST08.11)	8		Retail / F	--	11800 De Palma Rd, Corona, CA 92883	50	52	52	2	0	2	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M08.26	-4 (ST08.11)	8		Outdoor dining / E	1	11800 De Palma Rd, Corona, CA 92883	50	52	52	2	0	2	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M08.27 / ST08.11	-4 (ST08.11)	8		Outdoor Seating / E	1	11800 De Palma Rd, Corona, CA 92883	61	62	62	1	0	1	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M09.01	0 (ST09.01)	9		Restaurant / E	--	Future address unknown	65	69	70	4	1	5	E (72)	N/A*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M09.02	0 (ST09.01)	9		Gas station / F	--	Future address unknown	64	66	67	2	1	3	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M09.03 / ST09.01	0 (ST09.01)	9		Parking lot / F	--	Future address unknown	71	70	72	-1	2	1	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA

Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																										
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M09.04	0 (ST09.01)	9		Retail / F	--	Future address unknown	63	63	64	0	1	1	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M09.05	0 (ST09.01)	9		Restaurant / E	--	Future address unknown	63	52	53	-11	1	-10	E (72)	N/A*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M09.06	0 (ST09.01)	9		Undeveloped / G	--	N/A	60	63	64	3	1	4	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M09.07	-5 (ST09.02)	9		Undeveloped / G	--	N/A	54	57	57	3	0	3	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M09.08	-5 (ST09.02)	9		Undeveloped / G	--	N/A	59	58	59	-1	1	0	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M09.09 / ST09.02	-5 (ST09.02)	9		Undeveloped / G	--	N/A	66	67	68	1	1	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M09.10	-5 (ST09.02)	9		Undeveloped / G	--	N/A	60	61	62	1	1	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M09.11	-5 (ST09.02)	9		Undeveloped / G	--	N/A	60	61	62	1	1	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M09.12	-5 (ST09.03)	9		Undeveloped / G	--	N/A	59	60	60	1	0	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M09.13 / ST09.03	-5 (ST09.03)	9		Undeveloped / G	--	N/A	67	68	69	1	1	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M09.14	-5 (ST09.03)	9		Undeveloped / G	--	N/A	70	71	72	1	1	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M09.15 / ST09.04	-4 (ST09.04)	9		Undeveloped / G	--	N/A	69	70	71	1	1	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M09.16	0 (ST09.05)	9		Undeveloped / G	--	N/A	72	73	74	1	1	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M09.17 / ST09.05	0 (ST09.05)	9		Undeveloped / G	--	N/A	69	70	71	1	1	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.01	0 (ST10.02)	10		Undeveloped / G	--	N/A	68	69	69	1	0	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.02	0 (ST10.01)	10		Residential / B	1	25490 Temescal Valley Ln, Corona, CA 92883	56	57	58	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.03	0 (ST10.01)	10		Residential / B	3	25466 Temescal Valley Ln, Corona, CA 92883	56	57	57	1	0	1	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.04	0 (ST10.01)	10		Residential / B	6	25449 Temescal Valley Ln, Corona, CA 92883	43	43	44	0	1	1	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.05 / ST10.01	0 (ST10.01)	10		Residential / B	2	25430 Temescal Valley Ln, Corona, CA 92883	59	60	60	1	0	1	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.06	0 (ST10.01)	10		Residential / B	3	25406 Temescal Valley Ln, Corona, CA 92883	58	60	60	2	0	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.07	0 (ST10.01)	10		Residential / B	5	25377 Temescal Valley Ln, Corona, CA 92883	45	45	47	0	2	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.08	0 (ST10.01)	10		Residential / B	2	25370 Temescal Valley Ln, Corona, CA 92883	59	60	60	1	0	1	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.09	0 (ST10.01)	10		Residential / B	2	25346 Temescal Valley Ln, Corona, CA 92883	60	61	61	1	0	1	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA																																									
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																										
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M10.10	0 (ST10.01)	10		Residential / B	2	11600 Valley Oak Ln, Corona, CA 92883	53	53	54	0	1	1	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.11 / ST10.02	0 (ST10.02)	10		Emergency services / F	--	25310 Campbell Ranch Rd, Corona, CA 92883	64	64	65	0	1	1	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.12 / ST10.03	0 (ST10.03)	10		Residential / B	3	11512 Magnolia St, Corona, CA 92883	57	58	58	1	0	1	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.13	0 (ST10.03)	10		Residential / B	2	11431 Chinaberry St, Corona, CA 92883	47	48	50	1	2	3	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.14	0 (ST10.03)	10		Residential / B	4	11480 Magnolia St, Corona, CA 92883	56	57	58	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.15	0 (ST10.03)	10		Residential / B	4	11448 Magnolia St, Corona, CA 92883	57	58	59	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.16	0 (ST10.03)	10		Residential / B	4	11437 Magnolia St, Corona, CA 92883	43	44	45	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.17	0 (ST10.03)	10		Residential / B	3	11424 Magnolia St, Corona, CA 92883	57	58	58	1	0	1	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.18	0 (ST10.04)	10		Residential / B	4	11392 Magnolia St, Corona, CA 92883	57	58	59	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.19	0 (ST10.04)	10		Residential / B	4	11389 Magnolia St, Corona, CA 92883	44	45	46	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.20 / ST10.04	0 (ST10.04)	10		Residential / B	5	11360 Magnolia St, Corona, CA 92883	57	58	59	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.21	0 (ST10.04)	10		Residential / B	4	11341 Magnolia St, Corona, CA 92883	45	46	47	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.22	0 (ST10.04)	10		Residential / B	4	11328 Magnolia St, Corona, CA 92883	57	58	58	1	0	1	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.23	0 (ST10.04)	10		Residential / B	3	25095 Sagebush Way, Corona, CA 92883	47	48	49	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.24	0 (ST10.05)	10		Residential / B	4	11300 Pinecone St, Corona, CA 92883	56	57	58	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.25	0 (ST10.05)	10		Residential / B	3	25067 Birchtree Ct, Corona, CA 92883	49	50	52	1	2	3	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.26 / ST10.05	0 (ST10.05)	10		Residential / B	2	11268 Pinecone St, Corona, CA 92883	58	59	60	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.27	0 (ST10.05)	10		Residential / B	5	11228 Pinecone St, Corona, CA 92883	56	57	58	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.28	0 (ST10.05)	10		Residential / B	5	11225 Pinecone St, Corona, CA 92883	41	42	43	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.29	0 (ST10.05)	10		Residential / B	4	11196 Pinecone St, Corona, CA 92883	56	57	58	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.30	0 (ST10.05)	10		Residential / B	5	11169 Pinecone St, Corona, CA 92883	41	42	43	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.31	0 (ST10.06)	10		Residential / B	5	11156 Pinecone St, Corona, CA 92883	56	57	58	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA																																													
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																		
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M10.32	0 (ST10.06)	10		Residential / B	5	11124 Pinecone St, Corona, CA 92883	56	57	58	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.33	0 (ST10.06)	10		Residential / B	3	24975 Catkin St, Corona, CA 92883	47	48	49	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.34	0 (ST10.06)	10		Residential / B	3	24930 Elmwood St, Corona, CA 92883	46	47	49	1	2	3	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.35 / ST10.06	0 (ST10.06)	10		Residential / B	3	11118 Whitebark Ln, Corona, CA 92883	56	57	58	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.36	0 (ST10.06)	10		Residential / B	3	24933 Elmwood St, Corona, CA 92883	48	49	50	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.37	0 (ST10.06)	10		Residential / B	4	11086 Whitebark Ln, Corona, CA 92883	55	56	57	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.38	0 (ST10.06)	10		Residential / B	2	11065 Whitebark Ln, Corona, CA 92883	45	46	47	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.39	0 (ST10.06)	10		Residential / B	4	11054 Whitebark Ln, Corona, CA 92883	56	57	58	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.40	0 (ST10.06)	10		Residential / B	4	11022 Whitebark Ln, Corona, CA 92883	55	57	58	2	1	3	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.41	0 (ST10.06)	10		Residential / B	3	24874 Mulberry Rd, Corona, CA 92883	47	48	49	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.42	0 (ST10.06)	10		Residential / B	3	10990 Whitebark Ln, Corona, CA 92883	55	56	57	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.43	0 (ST10.06)	10		Residential / B	4	24869 Mulberry Rd, Corona, CA 92883	52	54	55	2	1	3	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.44 / ST10.07	0 (ST10.07)	10		Residential / B	4	24848 Cassia Ct, Corona, CA 92883	53	55	56	2	1	3	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.45	0 (ST10.07)	10		Residential / B	4	24891 Coral Canyon Rd, Corona, CA 92883	49	50	51	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA																																													
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																		
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M10.46	0 (ST10.07)	10		Residential / B	6	10846 Rosemary Way, Corona, CA 92883	53	54	55	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.47	0 (ST10.07)	10		Residential / B	6	10825 Rosemary Way, Corona, CA 92883	40	41	42	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.48	0 (ST10.07)	10		Residential / B	6	10806 Rosemary Way, Corona, CA 92883	52	53	54	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M10.49 / ST10.08	0 (ST10.08)	10		Undeveloped / G	--	N/A	66	67	67	1	0	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M11.01	-4 (ST11.02)	11		Undeveloped / G	--	N/A	62	63	63	1	0	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M11.02	-4 (ST11.02)	11		Industrial / F	--	N/A	63	64	65	1	1	2	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M11.03 / ST11.02	-4 (ST11.02)	11		Industrial / F	--	10671 Orange Grove Pl, Corona, CA 92883	60	61	62	1	1	2	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M11.04	-4 (ST11.02)	11		Undeveloped / G	--	N/A	64	65	65	1	0	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M11.05	-4 (ST11.02)	11		Undeveloped / G	--	N/A	59	60	61	1	1	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M11.06	0 (ST11.03)	11		Undeveloped / G	--	N/A	75	75	77	0	2	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M11.07	0 (ST11.03)	11		Undeveloped / G	--	N/A	77	78	79	1	1	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M11.08 / ST11.03	0 (ST11.03)	11		Undeveloped / G	--	N/A	63	64	65	1	1	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.01	0 (ST12.03)	12		Park / C	1	Future address unknown	66	62	63	-4	1	-3	C (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - $L_{eq}(h)$, dBA																																												
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, $L_{eq}(h)$, dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																	
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR
M12.02	0 (ST12.03)	12	SW1689 - Mainline EOS	Residential / B	2	Future address unknown	68	59	60	-9	1	-8	B (67)	NONE	59	1	0	59	1	0	59	1	0	58	2	0	57	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M12.03	0 (ST12.03)	12		Park / C	1	Future address unknown	64	73	73	9	0	9	C (67)	A/E	72	1	0	71	2	0	70	3	0	69	4	0	68	5	1	--	--	--	--	--	--	--	--	--	--	--	--
M12.04	0 (ST12.03)	12		Residential / B	4	Future address unknown	68	45	46	-23	1	-22	B (67)	NONE	46	0	0	46	0	0	46	0	0	46	0	0	46	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M12.05	0 (ST12.03)	12		Residential / B	2	Future address unknown	70	61	62	-9	1	-8	B (67)	NONE	61	1	0	60	2	0	60	2	0	60	2	0	59	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M12.06	0 (ST12.01)	12		Residential / B	5	10597 Wrangler Way, Corona, CA 92883	50	43	45	-7	2	-5	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.07	0 (ST12.03)	12		Residential / B	2	Future address unknown	69	50	51	-19	1	-18	B (67)	NONE	51	0	0	51	0	0	51	0	0	51	0	0	51	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M12.08	0 (ST12.01)	12		Residential / B	6	Future address unknown	63	46	47	-17	1	-16	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.09	0 (ST12.03)	12		Residential / B	2	Future address unknown	72	47	48	-25	1	-24	B (67)	NONE	48	0	0	48	0	0	48	0	0	48	0	0	48	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M12.10	0 (ST12.01)	12		Residential / B	6	Future address unknown	69	49	50	-20	1	-19	B (67)	NONE	50	0	0	50	0	0	50	0	0	50	0	0	50	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M12.11	0 (ST12.03)	12		Residential / B	2	Future address unknown	76	63	64	-13	1	-12	B (67)	NONE	63	1	0	63	1	0	62	2	0	62	2	0	62	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M12.11A	0 (ST12.03)	12		Park / C	1	Future address unknown	74	75	76	1	1	2	C (67)	A/E	75	1	0	74	2	0	74	2	0	73	3	0	71	5	1	--	--	--	--	--	--	--	--	--	--	--	--
M12.03	0 (ST12.03)	12	SW1691 - Trail Node	Park / C	1	Future address unknown	64	73	73	9	0	9	C (67)	A/E	65	8	1	62	11	1	60	13	1	59	14	1	58	15	1	57	16	1	--	--	--	--	--	--	65	8	1
M12.11A	0 (ST12.03)	12	SW1693 - Dog Park	Park / C	1	Future address unknown	74	75	76	1	1	2	C (67)	A/E	69	7	1	68	8	1	68	8	1	67	9	1	67	9	1	67	9	1	--	--	--	--	--	--	69	7	1
M12.12	0 (ST12.01)	12		Residential / B	5	Future address unknown	65	40	42	-25	2	-23	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.13	0 (ST12.03)	12		Residential / B	2	Future address unknown	71	45	47	-26	2	-24	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.14 / ST12.01	0 (ST12.01)	12		Residential / B	3	10653 Wrangler Way, Corona, CA 92883	62	46	48	-16	2	-14	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.15	0 (ST12.03)	12		Residential / B	6	Future address unknown	69	59	59	-10	0	-10	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.16	0 (ST12.03)	12		Residential / B	1	Future address unknown	69	62	62	-7	0	-7	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.17	0 (ST12.01)	12		Residential / B	2	10681 Wrangler Way, Corona, CA 92883	63	47	49	-16	2	-14	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.18	0 (ST12.01)	12		Residential / B	5	Future address unknown	64	50	51	-14	1	-13	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.19	0 (ST12.01)	12		Residential / B	6	Future address unknown	62	50	52	-12	2	-10	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.20	0 (ST12.01)	12		Residential / B	2	Future address unknown	70	65	65	-5	0	-5	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - $L_{eq}(h)$, dBA

Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)

Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, $L_{eq}(h)$, dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR
M12.21	0 (ST12.03)	12		Residential / B	2	Future address unknown	66	59	60	-7	1	-6	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.22	0 (ST12.03)	12		Residential / B	2	Future address unknown	62	59	59	-3	0	-3	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.23	0 (ST12.03)	12		Residential / B	2	10493 Whitecrown Cir, Corona, CA 92883	48	49	50	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.24 / ST12.03	0 (ST12.03)	12		Residential / B	3	10498 Whitecrown Cir, Corona, CA 92883	59	60	61	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.25	0 (ST12.02)	12		Residential / B	2	10469 Whitecrown Cir, Corona, CA 92883	45	46	47	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.26	0 (ST12.03)	12		Residential / B	3	10468 Whitecrown Cir, Corona, CA 92883	60	61	62	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.27	0 (ST12.02)	12		Residential / B	3	10435 Baldy Ct, Corona, CA 92883	53	54	55	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.28 / ST12.04	0 (ST12.04)	12		Residential / B	4	10438 Whitecrown Cir, Corona, CA 92883	60	61	61	1	0	1	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.29	0 (ST12.02)	12		Residential / B	3	10430 Baldy Ct, Corona, CA 92883	51	52	53	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.30	0 (ST12.04)	12		Residential / B	3	10414 Whitecrown Cir, Corona, CA 92883	61	61	62	0	1	1	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.31	0 (ST12.02)	12		Residential / B	3	10373 Whitecrown Cir, Corona, CA 92883	54	54	56	0	2	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.32 / ST12.05	0 (ST12.05)	12		Residential / B	3	10396 Whitecrown Cir, Corona, CA 92883	61	62	62	1	0	1	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.33	0 (ST12.05)	12		Residential / B	3	24308 Kenosha Ct, Corona, CA 92883	59	60	61	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.34 / ST12.02	0 (ST12.02)	12		Sidewalk / F	--	10348 Whitecrown Cir, Corona, CA 92883	55	55	56	0	1	1	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.35	0 (ST12.05)	12		Residential / B	3	24280 Kenosha Ct, Corona, CA 92883	53	54	55	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.36	0 (ST12.02)	12		Residential / B	1	10348 Whitecrown Cir, Corona, CA 92883	46	47	48	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.37	0 (ST12.02)	12		Residential / B	2	24299 Kenosha Ct, Corona, CA 92883	50	51	52	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.38	0 (ST12.05)	12		Residential / B	2	10298 Icefield Ct, Corona, CA 92883	57	57	58	0	1	1	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.39 / ST12.06	0 (ST12.06)	12		Residential / B	2	10286 Icefield Ct, Corona, CA 92883	55	56	57	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.40	0 (ST12.07)	12		Undeveloped / G	--	N/A	69	70	71	1	1	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.41 / ST12.07	0 (ST12.07)	12		Carousel / C	1	23900 Temescal Canyon Rd, Corona, CA 92883	62	63	63	1	0	1	C (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.42	0 (ST12.07)	12		Restaurant outdoor dining / E	1	23900 Temescal Canyon Rd, Corona, CA 92883	59	60	60	1	0	1	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA																																									
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																										
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M12.43	0 (ST12.07)	12		Outdoor seating area / E	1	23900 Temescal Canyon Rd, Corona, CA 92883	62	63	63	1	0	1	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.44	0 (ST12.07)	12		Restaurant outdoor dining / E	1	23900 Temescal Canyon Rd, Corona, CA 92883	62	63	64	1	1	2	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.45 / ST12.08	0 (ST12.08)	12		Outdoor seating area / E	1	23900 Temescal Canyon Rd, Corona, CA 92883	64	65	66	1	1	2	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.46	0 (ST12.08)	12		Restaurant outdoor dining / E	1	23800 Temescal Canyon Rd, Corona, CA 92883	65	66	67	1	1	2	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.47	0 (ST12.08)	12		Retail-plant nursery / F	--	23900 Temescal Canyon Rd, Corona, CA 92883	67	68	69	1	1	2	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.48	0 (ST12.09)	12		Gas station / F	--	23760 Temescal Canyon Rd, Corona, CA 92883	68	69	69	1	0	1	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.49 / ST12.09	0 (ST12.09)	12		Parking lot / F	--	23740 Temescal Canyon Rd, Corona, CA 92883	69	70	70	1	0	1	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M12.50	0 (ST12.09)	12	SW1751A - ROW	Restaurant outdoor dining / E	1	23740 Temescal Canyon Rd, Corona, CA 92883	70	71	72	1	1	2	E (72)	A/E	72	0	0	71	1	0	70	2	0	68	4	0	68	4	0	68	4	0	67	5	1	67	5	1	--	--	--
M12.50	0 (ST12.09)	12	SW1753B - Ramp EOS	Restaurant outdoor dining / E	1	23740 Temescal Canyon Rd, Corona, CA 92883	70	71	72	1	1	2	E (72)	A/E	72	0	0	72	0	0	72	0	0	72	0	0	72	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M12.50	0 (ST12.09)	12	SW1753A - Mainline EOS	Restaurant outdoor dining / E	1	23740 Temescal Canyon Rd, Corona, CA 92883	70	71	72	1	1	2	E (72)	A/E	69	3	0	69	3	0	69	3	0	69	3	0	69	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M12.50	0 (ST12.09)	12	SW1753A + SW1753B - Combination Mainline & Ramp EOS	Restaurant outdoor dining / E	1	23740 Temescal Canyon Rd, Corona, CA 92883	70	71	72	1	1	2	E (72)	A/E	69	3	0	69	3	0	69	3	0	69	3	0	68	4	0	--	--	--	--	--	--	--	--	--	--	--	--
M12.50	0 (ST12.09)	12	SW1751B - Private Property	Restaurant outdoor dining / E	1	23740 Temescal Canyon Rd, Corona, CA 92883	70	71	72	1	1	2	E (72)	A/E	66	6	1	63	9	1	61	11	1	60	12	1	59	13	1	58	14	1	--	--	--	--	--	--	65	7	1
M13.01 / ST13.01	0 (ST13.01)	13		Outdoor seating area / E	1	23255 Temescal Canyon Rd, Corona, CA 92883	67	68	68	1	0	1	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M13.02	0 (ST13.01)	13		Outdoor seating area / E	1	23255 Temescal Canyon Rd, Corona, CA 92883	60	62	62	2	0	2	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - $L_{eq}(h)$, dBA																																												
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, $L_{eq}(h)$, dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																	
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR
M13.03	0 (ST13.01)	13		Undeveloped / G	--	N/A	74	75	76	1	1	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M13.04	0 (ST13.01)	13		Industrial / F	--	Future address unknown	61	62	62	1	0	1	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M13.05	0 (ST13.02)	13	SW1784A - Mainline EOS	Outdoor dining / E	1	23100 Temescal Canyon Rd, Corona, CA 92883	64	66	66	2	0	2	E (72)	NONE	65	1	0	64	2	0	64	2	0	64	2	0	64	2	0	--	--	--	--	--	--	--	--	--	--	--
M13.06 / ST13.02	0 (ST13.02)	13		Driving range / C	1	23100 Temescal Canyon Rd, Corona, CA 92883	68	70	70	2	0	2	C (67)	A/E	69	1	0	69	1	0	69	1	0	69	1	0	69	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M13.05	0 (ST13.02)	13	SW1784B - Private Property	Outdoor dining / E	1	23100 Temescal Canyon Rd, Corona, CA 92883	64	66	66	2	0	2	E (72)	NONE	66	0	0	66	0	0	65	1	0	65	1	0	65	1	0	65	1	0	--	--	--	--	--	--	66	0	0
M13.06 / ST13.02	0 (ST13.02)	13		Driving range / C	1	23100 Temescal Canyon Rd, Corona, CA 92883	68	70	70	2	0	2	C (67)	A/E	66	4	0	62	8	1	61	9	1	60	10	1	58	12	1	58	12	1	--	--	--	--	--	--	62	8	1
M13.07	0 (ST13.03)	13		Undeveloped / G	--	N/A	67	68	69	1	1	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M13.08	0 (ST13.03)	13		Industrial/commercial / F	--	22600 Temescal Canyon Rd, Corona, CA 92883	71	73	73	2	0	2	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M13.09	0 (ST13.03)	13		Industrial/commercial / F	--	22520 Temescal Canyon Rd ste b, Corona, CA 92883	72	74	74	2	0	2	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M13.10 / ST13.03	0 (ST13.03)	13		Industrial/commercial / F	--	22420 Temescal Canyon Rd, Corona, CA 92883	66	68	68	2	0	2	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M13.11	0 (ST13.03)	13		Industrial/commercial / F	--	22324 Temescal Canyon Rd, Corona, CA 92883	72	74	74	2	0	2	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M13.12	-4 (ST13.04)	13		Industrial/commercial / F	--	9116 Stellar Ct, Corona, CA 92883	62	64	64	2	0	2	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M13.13	-4 (ST13.04)	13		Industrial/commercial / F	--	9022 Pulsar Ct, Corona, CA 92883	66	67	68	1	1	2	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M13.14 / ST13.04	-4 (ST13.04)	13		Outdoor Dining / E	1	9022 Pulsar Ct, Corona, CA 92883	66	68	68	2	0	2	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M13.15	-4 (ST13.05)	13		Industrial/Commercial / F	--	9036 Pulsar Ct, Corona, CA 92883	53	54	55	1	1	2	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M13.16 / ST13.05	-4 (ST13.05)	13		Residential / B	1	9010 Leroy Rd, Corona, CA 92883	57	59	59	2	0	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M13.17	0 (ST13.06)	13		Industrial / F	--	21950 Temescal Canyon Rd, Corona, CA 92883	71	72	73	1	1	2	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M13.18	0 (ST13.07)	13		Industrial/commercial / F	--	21785 Temescal Canyon Rd, Corona, CA 92883	68	69	69	1	0	1	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M13.19 / ST13.06	0 (ST13.06)	13		Undeveloped / G	--	8920 Foster Rd, Corona, CA 92883	67	69	69	2	0	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M13.20	0 (ST13.06)	13		Residential / B	3	8920 Foster Rd, Corona, CA 92883	62	63	64	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - $L_{eq}(h)$, dBA																																												
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, $L_{eq}(h)$, dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR
M13.21	0 (ST13.07)	13	SW1872 - ROW	Residential / B	1	21705 Temescal Canyon Rd, Corona, CA 92883	66	68	68	2	0	2	B (67)	A/E	66	2	0	65	3	0	65	3	0	64	4	0	63	5	1	63	5	1	62	6	1	--	--	--	63	5	1
M13.22 / ST13.07	0 (ST13.07)	13		Driveway / F	--	21705 Temescal Canyon Rd, Corona, CA 92883	65	67	68	2	1	3	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M13.23 / ST13.08	-4 (ST13.08)	13		Residential / B	1	21653 Temescal Canyon Rd, Corona, CA 92883	67	69	69	2	0	2	B (67)	A/E	69	0	0	67	2	0	65	4	0	63	6	1	62	7	1	61	8	1	60	9	1	--	--	--	62	7	1
M13.24	-4 (ST13.08)	13		Residential / B	1	21541 Temescal Canyon Rd, Corona, CA 92883	61	62	62	1	0	1	B (67)	NONE	61	1	0	60	2	0	59	3	0	58	4	0	58	4	0	57	5	1	57	5	1	--	--	--	57	5	1
M13.25	-4 (ST13.08)	13		Residential / B	2	21655 Temescal Canyon Rd, Corona, CA 92883	57	59	59	2	0	2	B (67)	NONE	59	0	0	59	0	0	58	1	0	58	1	0	58	1	0	58	1	0	57	2	0	--	--	--	58	1	0
M13.21	0 (ST13.07)	13	SW1874 - Ramp EOS	Residential / B	1	21705 Temescal Canyon Rd, Corona, CA 92883	66	68	68	2	0	2	B (67)	A/E	64	4	0	64	4	0	63	5	1	62	6	1	62	6	1	--	--	--	--	--	--	--	--	--	63	5	1
M13.23 / ST13.08	-4 (ST13.08)	13		Residential / B	1	21653 Temescal Canyon Rd, Corona, CA 92883	67	69	69	2	0	2	B (67)	A/E	64	5	1	63	6	1	62	7	1	61	8	1	60	9	1	--	--	--	--	--	--	--	--	--	62	7	1
M13.24	-4 (ST13.08)	13		Residential / B	1	21541 Temescal Canyon Rd, Corona, CA 92883	61	62	62	1	0	1	B (67)	NONE	62	0	0	61	1	0	61	1	0	61	1	0	61	1	0	--	--	--	--	--	--	--	--	--	--	--	--	61	1	0
M13.25	-4 (ST13.08)	13		Residential / B	2	21655 Temescal Canyon Rd, Corona, CA 92883	57	59	59	2	0	2	B (67)	NONE	59	0	0	58	1	0	58	1	0	58	1	0	58	1	0	--	--	--	--	--	--	--	--	--	--	--	--	58	1	0
M13.21	0 (ST13.07)	13	SW1878 - Mainline EOS	Residential / B	1	21705 Temescal Canyon Rd, Corona, CA 92883	66	68	68	2	0	2	B (67)	A/E	68	0	0	68	0	0	68	0	0	68	0	0	68	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M13.23 / ST13.08	-4 (ST13.08)	13		Residential / B	1	21653 Temescal Canyon Rd, Corona, CA 92883	67	69	69	2	0	2	B (67)	A/E	67	2	0	66	3	0	66	3	0	66	3	0	66	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M13.24	-4 (ST13.08)	13		Residential / B	1	21541 Temescal Canyon Rd, Corona, CA 92883	61	62	62	1	0	1	B (67)	NONE	60	2	0	60	2	0	59	3	0	59	3	0	59	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M13.25	-4 (ST13.08)	13		Residential / B	2	21655 Temescal Canyon Rd, Corona, CA 92883	57	59	59	2	0	2	B (67)	NONE	58	1	0	58	1	0	58	1	0	57	2	0	57	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M13.21	0 (ST13.07)	13	SW1874 + SW1878 - Combination Mainline & Ramp EOS	Residential / B	1	21705 Temescal Canyon Rd, Corona, CA 92883	66	68	68	2	0	2	B (67)	A/E	64	4	0	64	4	0	63	5	1	62	6	1	62	6	1	--	--	--	--	--	--	--	--	--	63	5	1
M13.23 / ST13.08	-4 (ST13.08)	13		Residential / B	1	21653 Temescal Canyon Rd, Corona, CA 92883	67	69	69	2	0	2	B (67)	A/E	63	6	1	62	7	1	61	8	1	60	9	1	59	10	1	--	--	--	--	--	--	--	--	--	61	8	1
M13.24	-4 (ST13.08)	13		Residential / B	1	21541 Temescal Canyon Rd, Corona, CA 92883	61	62	62	1	0	1	B (67)	NONE	59	3	0	58	4	0	57	5	1	57	5	1	57	5	1	--	--	--	--	--	--	--	--	--	--	--	--	57	5	1
M13.25	-4 (ST13.08)	13		Residential / B	2	21655 Temescal Canyon Rd, Corona, CA 92883	57	59	59	2	0	2	B (67)	NONE	58	1	0	57	2	0	57	2	0	57	2	0	56	3	0	--	--	--	--	--	--	--	--	--	--	--	--	57	2	0
M13.26	0 (ST13.06)	13		Residential / B	4	21650 Temescal Canyon Rd, Corona, CA 92883	59	61	61	2	0	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M13.27	-4 (ST13.08)	13		Gas station / F	--	8765 Dos Lagos Dr, Corona, CA 92883	61	63	63	2	0	2	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M13.28	0 (ST13.06)	13		Restaurant outdoor dining / E	1	21501 Temescal Canyon Rd, Corona, CA 92883	65	67	67	2	0	2	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.01	0 (ST14.01)	14		Undeveloped / G	--	N/A	74	75	76	1	1	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.02	0 (ST14.01)	14		Residential / B	2	23275 Lawson Rd, Corona, CA 92883	64	65	65	1	0	1	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA

Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)

Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M14.03 / ST14.01	0 (ST14.01)	14		Undeveloped / G	--	N/A	65	66	66	1	0	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.04	0 (ST14.01)	14		Undeveloped / G	--	N/A	71	71	72	0	1	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.05	0 (ST14.02)	14	SW1785 - Mainline EOS	Residential / B	2	9529 Stone Canyon Rd, Corona, CA 92883	65	66	65 ++	1	-1	0	B (67)	NONE	64	1	0	64	1	0	62	3	0	61	4	0	60	5	2	--	--	--	--	--	--	--	--	--	--	--	--
M14.06 / ST14.02	0 (ST14.02)	14	SW1785 - Mainline EOS	Residential / B	1	9553 Stone Canyon Rd, Corona, CA 92883	65	66	65 ++	1	-1	0	B (67)	NONE	64	1	0	64	1	0	62	3	0	61	4	0	60	5	1	--	--	--	--	--	--	--	--	--	--	--	--
M14.07	0 (ST14.02)	14	SW1785 - Mainline EOS	Residential / B	1	9575 Stone Canyon Rd, Corona, CA 92883	66	67	67	1	0	1	B (67)	A/E	65	2	0	65	2	0	64	3	0	63	4	0	61	6	1	--	--	--	--	--	--	--	--	--	--	--	--
M14.08	0 (ST14.02)	14	SW1785 - Mainline EOS	Residential / B	3	9568 Stone Canyon Rd, Corona, CA 92883	62	63	63	1	0	1	B (67)	NONE	62	1	0	61	2	0	61	2	0	60	3	0	59	4	0	--	--	--	--	--	--	--	--	--	--	--	--
M14.05	0 (ST14.02)	14	SW1789 - Private Property	Residential / B	2	9529 Stone Canyon Rd, Corona, CA 92883	65	66	65 ++	1	-1	0	B (67)	NONE	65	0	0	65	0	0	65	0	0	65	0	0	65	0	0	65	0	0	--	--	--	--	--	--	65	0	0
M14.06 / ST14.02	0 (ST14.02)	14	SW1789 - Private Property	Residential / B	1	9553 Stone Canyon Rd, Corona, CA 92883	65	66	65 ++	1	-1	0	B (67)	NONE	65	0	0	65	0	0	65	0	0	65	0	0	65	0	0	65	0	0	--	--	--	--	--	--	65	0	0
M14.07	0 (ST14.02)	14	SW1789 - Private Property	Residential / B	1	9575 Stone Canyon Rd, Corona, CA 92883	66	67	67	1	0	1	B (67)	A/E	63	4	0	60	7	1	59	8	1	58	9	1	57	10	1	56	11	1	--	--	--	--	--	--	60	7	1
M14.09 / ST14.04	0 (ST14.04)	14		Residential / B	3	9538 Palm Canyon Dr, Corona, CA 92883	59	60	60	1	0	1	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.10	0 (ST14.04)	14		Residential / B	2	9502 Palm Canyon Dr, Corona, CA 92883	52	53	54	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.11	0 (ST14.04)	14		Residential / B	3	9525 Nickellaus Ct, Corona, CA 92883	55	56	57	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.12	0 (ST14.04)	14		Residential / B	2	9535 Nickellaus Ct, Corona, CA 92883	59	60	61	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.13	0 (ST14.05)	14		Residential / B	6	9429 Lapis Ct, Corona, CA 92883	48	49	51	1	2	3	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.14	0 (ST14.05)	14		Residential / B	2	9439 Lapis Ct, Corona, CA 92883	59	60	61	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.15 / ST14.05	0 (ST14.05)	14		Sidewalk / F	--	Between 9424 & 9439 Lapis Ct, Corona, CA 92883	58	59	60	1	1	2	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.16	0 (ST14.03)	14		Residential / B	3	9395 Nickellaus Ct, Corona, CA 92883	45	46	46	1	0	1	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.17	0 (ST14.05)	14		Residential / B	2	9404 Lapis Ct, Corona, CA 92883	50	50	51	0	1	1	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.18	0 (ST14.05)	14		Residential / B	3	9424 Lapis Ct, Corona, CA 92883	59	60	61	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.19	0 (ST14.03)	14		Residential / B	4	9325 Nickellaus Ct, Corona, CA 92883	41	42	42	1	0	1	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.20	0 (ST14.06)	14		Residential / B	3	9340 Nickellaus Ct, Corona, CA 92883	56	57	58	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.21	0 (ST14.06)	14		Residential / B	2	9310 Nickellaus Ct, Corona, CA 92883	55	56	57	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - $L_{eq}(h)$, dBA																																												
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, $L_{eq}(h)$, dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																	
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR
M14.22 / ST14.06	0 (ST14.06)	14		Residential / B	2	22806 Hannah Ct, Corona, CA 92883	57	58	59	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.23	0 (ST14.03)	14		Residential / B	2	9300 Nickellaus Ct, Corona, CA 92883	51	52	53	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.24	0 (ST14.03)	14		Residential / B	2	22781 Hannah Ct, Corona, CA 92883	47	48	49	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.25	0 (ST14.06)	14		Residential / B	4	22776 Hannah Ct, Corona, CA 92883	62	63	63	1	0	1	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.26	0 (ST14.03)	14		Residential / B	3	9289 Scotty Way, Corona, CA 92883	46	47	47	1	0	1	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.27	-4 (ST14.07)	14		Residential / B	3	22736 Hannah Ct, Corona, CA 92883	59	60	61	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.28 / ST14.03	0 (ST14.03)	14		Residential / B	2	9294 Scotty Way, Corona, CA 92883	53	54	55	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.29	0 (ST14.03)	14		Residential / B	3	22691 Hannah Ct, Corona, CA 92883	50	51	52	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.30 / ST14.07	-4 (ST14.07)	14		Residential / B	4	22706 Hannah Ct, Corona, CA 92883	58	59	60	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.31	0 (ST14.03)	14		Residential / B	2	22646 Hannah Ct, Corona, CA 92883	59	60	60	1	0	1	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.32	-4 (ST14.07)	14		Residential / B	3	22666 Hannah Ct, Corona, CA 92883	59	60	61	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.33	-4 (ST14.07)	14		Undeveloped / G	--	N/A	72	73	73	1	0	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.34	-4 (ST14.10)	14		Residential / B	5	22616 Silver Dollar St, Corona, CA 92883	57	59	59	2	0	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.35	-4 (ST14.10)	14		Residential / B	2	22588 Silver Dollar St, Corona, CA 92883	58	59	59	1	0	1	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.36	0 (ST14.08)	14		Residential / B	5	22577 Silver Dollar St, Corona, CA 92883	50	51	52	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.37	-4 (ST14.10)	14		Residential / B	2	22560 Silver Dollar St, Corona, CA 92883	59	60	61	1	1	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - $L_{eq}(h)$, dBA																																												
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, $L_{eq}(h)$, dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																	
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR
M14.38	-4 (ST14.10)	14	SW1829A - Mainline EOS	Residential / B	2	22520 Silver Dollar St, Corona, CA 92883	59	61	61	2	0	2	B (67)	NONE	61	0	0	61	0	0	61	0	0	60	1	0	59	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M14.39 / ST14.08	0 (ST14.08)	14		Residential / B	3	22517 Silver Dollar St, Corona, CA 92883	48	49	50	1	1	2	B (67)	NONE	50	0	0	50	0	0	50	0	0	50	0	0	50	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M14.40	-4 (ST14.10)	14		Residential / B	2	22500 Silver Dollar St, Corona, CA 92883	59	60	61	1	1	2	B (67)	NONE	61	0	0	61	0	0	61	0	0	60	1	0	59	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M14.41	0 (ST14.08)	14		Residential / B	3	9193 Sydney Blue Cir, Corona, CA 92883	56	56	57	0	1	1	B (67)	NONE	57	0	0	57	0	0	57	0	0	57	0	0	56	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M14.42 / ST14.10	-4 (ST14.10)	14		Residential / B	2	22480 Silver Dollar St, Corona, CA 92883	61	62	62	1	0	1	B (67)	NONE	62	0	0	61	1	0	61	1	0	60	2	0	59	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M14.43	0 (ST14.08)	14		Residential / B	2	22473 Silver Dollar St, Corona, CA 92883	52	53	54	1	1	2	B (67)	NONE	54	0	0	54	0	0	54	0	0	54	0	0	53	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M14.44	0 (ST14.11)	14		Residential / B	2	22460 Silver Dollar St, Corona, CA 92883	64	65	66	1	1	2	B (67)	A/E	65	1	0	65	1	0	65	1	0	64	2	0	63	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M14.45	0 (ST14.08)	14		Residential / B	5	22441 Silver Dollar St, Corona, CA 92883	50	51	52	1	1	2	B (67)	NONE	52	0	0	52	0	0	52	0	0	52	0	0	51	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M14.46 / ST14.11	0 (ST14.11)	14		Residential / B	2	22430 Silver Dollar St, Corona, CA 92883	65	66	66	1	0	1	B (67)	A/E	65	1	0	65	1	0	64	2	0	64	2	0	62	4	0	--	--	--	--	--	--	--	--	--	--	--	--
M14.47	0 (ST14.11)	14		Park / C	1	22411 White Sage St, Corona, CA 92883	71	72	72	1	0	1	C (67)	A/E	71	1	0	69	3	0	69	3	0	68	4	0	67	5	1	--	--	--	--	--	--	--	--	--	--	--	--
M14.47A	0 (ST14.11)	14		Park / C	1	22411 White Sage St, Corona, CA 92883	68	69	69	1	0	1	C (67)	A/E	67	2	0	66	3	0	66	3	0	65	4	0	64	5	1	--	--	--	--	--	--	--	--	--	--	--	--
M14.47B	0 (ST14.11)	14		Park / C	1	22411 White Sage St, Corona, CA 92883	72	73	73	1	0	1	C (67)	A/E	71	2	0	70	3	0	69	4	0	69	4	0	68	5	1	--	--	--	--	--	--	--	--	--	--	--	--
M14.48 / ST14.09	0 (ST14.09)	14		Residential / B	4	9056 Patina Ct, Corona, CA 92883	53	54	55	1	1	2	B (67)	NONE	55	0	0	55	0	0	55	0	0	54	1	0	53	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M14.49	0 (ST14.09)	14		Residential / B	2	9066 Patina Ct, Corona, CA 92883	63	64	64	1	0	1	B (67)	NONE	63	1	0	61	3	0	61	3	0	60	4	0	59	5	2	--	--	--	--	--	--	--	--	--	--	--	--
M14.50	0 (ST14.12)	14	SW1829A - Mainline EOS	Residential / B	1	9081 Evonvale Dr, Corona, CA 92883	65	67	67	2	0	2	B (67)	A/E	66	1	0	65	2	0	64	3	0	63	4	0	62	5	1	--	--	--	--	--	--	--	--	--	--	--	--
M14.50A	0 (ST14.12)	14		Residential / B	1	9076 Patina Ct, Corona, CA 92883	68	69	69	1	0	1	B (67)	A/E	68	1	0	67	2	0	66	3	0	66	3	0	64	5	1	--	--	--	--	--	--	--	--	--	--	--	--
M14.51	0 (ST14.09)	14		Residential / B	2	9054 Evonvale Dr, Corona, CA 92883	63	64	64	1	0	1	B (67)	NONE	63	1	0	61	3	0	61	3	0	61	3	0	58	6	2	--	--	--	--	--	--	--	--	--	--	--	--
M14.52 / ST14.12	0 (ST14.12)	14		Residential / B	4	22312 Hayworth Ct, Corona, CA 92883	65	66	66	1	0	1	B (67)	A/E	65	1	0	65	1	0	65	1	0	64	2	0	62	4	0	--	--	--	--	--	--	--	--	--	--	--	--
M14.53	0 (ST14.09)	14		Residential / B	4	22295 Hayworth Ct, Corona, CA 92883	54	55	57	1	2	3	B (67)	NONE	56	1	0	56	1	0	56	1	0	56	1	0	55	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M14.54	0 (ST14.12)	14		Residential / B	1	22275 Hayworth Ct, Corona, CA 92883	66	67	68	1	1	2	B (67)	A/E	65	3	0	65	3	0	64	4	0	64	4	0	63	5	1	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA

Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																										
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M14.38	-4 (ST14.10)	14		Residential / B	2	22520 Silver Dollar St, Corona, CA 92883	59	61	61	2	0	2	B (67)	NONE	61	0	0	61	0	0	61	0	0	61	0	0	60	1	0	59	2	0	59	2	0	59	2	0	--	--	--
M14.39 / ST14.08	0 (ST14.08)	14		Residential / B	3	22517 Silver Dollar St, Corona, CA 92883	48	49	50	1	1	2	B (67)	NONE	50	0	0	50	0	0	50	0	0	50	0	0	50	0	0	50	0	0	50	0	0	49	1	0	--	--	--
M14.40	-4 (ST14.10)	14		Residential / B	2	22500 Silver Dollar St, Corona, CA 92883	59	60	61	1	1	2	B (67)	NONE	61	0	0	61	0	0	61	0	0	61	0	0	60	1	0	59	2	0	58	3	0	58	3	0	--	--	--
M14.41	0 (ST14.08)	14		Residential / B	3	9193 Sydney Blue Cir, Corona, CA 92883	56	56	57	0	1	1	B (67)	NONE	57	0	0	57	0	0	57	0	0	57	0	0	57	0	0	57	0	0	56	1	0	56	1	0	--	--	--
M14.42 / ST14.10	-4 (ST14.10)	14	SW1829B - ROW	Residential / B	2	22480 Silver Dollar St, Corona, CA 92883	61	62	62	1	0	1	B (67)	NONE	62	0	0	62	0	0	62	0	0	62	0	0	61	1	0	60	2	0	59	3	0	59	3	0	--	--	--
M14.43	0 (ST14.08)	14		Residential / B	2	22473 Silver Dollar St, Corona, CA 92883	52	53	54	1	1	2	B (67)	NONE	54	0	0	54	0	0	54	0	0	54	0	0	54	0	0	54	0	0	53	1	0	52	2	0	--	--	--
M14.44	0 (ST14.11)	14		Residential / B	2	22460 Silver Dollar St, Corona, CA 92883	64	65	66	1	1	2	B (67)	A/E	66	0	0	65	1	0	65	1	0	65	1	0	64	2	0	64	2	0	63	3	0	62	4	0	--	--	--
M14.45	0 (ST14.08)	14		Residential / B	5	22441 Silver Dollar St, Corona, CA 92883	50	51	52	1	1	2	B (67)	NONE	52	0	0	52	0	0	52	0	0	52	0	0	52	0	0	52	0	0	51	1	0	51	1	0	--	--	--
M14.46 / ST14.11	0 (ST14.11)	14		Residential / B	2	22430 Silver Dollar St, Corona, CA 92883	65	66	66	1	0	1	B (67)	A/E	66	0	0	65	1	0	65	1	0	64	2	0	64	2	0	63	3	0	62	4	0	62	4	0	--	--	--
M14.47	0 (ST14.11)	14	-	Park / C	1	22411 White Sage St, Corona, CA 92883	71	72	72	1	0	1	C (67)	A/E	72	0	0	71	1	0	70	2	0	69	3	0	69	3	0	68	4	0	67	5	1	67	5	1	--	--	--
M14.47A	0 (ST14.11)	14		Park / C	1	22411 White Sage St, Corona, CA 92883	68	69	69	1	0	1	C (67)	A/E	68	1	0	68	1	0	66	3	0	66	3	0	65	4	0	64	5	1	63	6	1	63	6	1	--	--	--
M14.47B	0 (ST14.11)	14		Park / C	1	22411 White Sage St, Corona, CA 92883	72	73	73	1	0	1	C (67)	A/E	72	1	0	72	1	0	70	3	0	70	3	0	69	4	0	68	5	1	68	5	1	68	5	1	--	--	--
M14.48 / ST14.09	0 (ST14.09)	14		Residential / B	4	9056 Patina Ct, Corona, CA 92883	53	54	55	1	1	2	B (67)	NONE	55	0	0	55	0	0	55	0	0	55	0	0	55	0	0	55	0	0	54	1	0	53	2	0	--	--	--
M14.49	0 (ST14.09)	14		Residential / B	2	9066 Patina Ct, Corona, CA 92883	63	64	64	1	0	1	B (67)	NONE	63	1	0	63	1	0	62	2	0	61	3	0	60	4	0	60	4	0	60	4	0	59	5	2	--	--	--
M14.50	0 (ST14.12)	14		Residential / B	1	9081 Evonvale Dr, Corona, CA 92883	65	67	67	2	0	2	B (67)	A/E	67	0	0	66	1	0	65	2	0	64	3	0	64	3	0	63	4	0	64	3	0	64	3	0	--	--	--
M14.50A	0 (ST14.12)	14	SW1829B - ROW	Residential / B	1	9076 Patina Ct, Corona, CA 92883	68	69	69	1	0	1	B (67)	A/E	69	0	0	69	0	0	68	1	0	67	2	0	66	3	0	65	4	0	64	5	1	64	5	1	--	--	--
M14.51	0 (ST14.09)	14		Residential / B	2	9054 Evonvale Dr, Corona, CA 92883	63	64	64	1	0	1	B (67)	NONE	64	0	0	64	0	0	63	1	0	62	2	0	61	3	0	59	5	2	58	6	2	58	6	2	--	--	--
M14.52 / ST14.12	0 (ST14.12)	14		Residential / B	4	22312 Hayworth Ct, Corona, CA 92883	65	66	66	1	0	1	B (67)	A/E	66	0	0	66	0	0	65	1	0	65	1	0	65	1	0	63	3	0	63	3	0	62	4	0	--	--	--
M14.53	0 (ST14.09)	14		Residential / B	4	22295 Hayworth Ct, Corona, CA 92883	54	55	57	1	2	3	B (67)	NONE	57	0	0	57	0	0	57	0	0	56	1	0	56	1	0	56	1	0	56	1	0	55	2	0	--	--	--
M14.54	0 (ST14.12)	14		Residential / B	1	22275 Hayworth Ct, Corona, CA 92883	66	67	68	1	1	2	B (67)	A/E	67	1	0	67	1	0	66	2	0	66	2	0	65	3	0	65	3	0	63	5	1	63	5	1	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - $L_{eq}(h)$, dBA																																												
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, $L_{eq}(h)$, dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR
M14.38	-4 (ST14.10)	14	SW1823 - Private Property	Residential / B	2	22520 Silver Dollar St, Corona, CA 92883	59	61	61	2	0	2	B (67)	NONE	61	0	0	59	2	0	57	4	0	56	5	2	55	6	2	54	7	2	--	--	--	--	--	--	56	5	2
M14.39 / ST14.08	0 (ST14.08)	14		Residential / B	3	22517 Silver Dollar St, Corona, CA 92883	48	49	50	1	1	2	B (67)	NONE	50	0	0	50	0	0	50	0	0	50	0	0	49	1	0	49	1	0	--	--	--	--	--	--	50	0	0
M14.40	-4 (ST14.10)	14		Residential / B	2	22500 Silver Dollar St, Corona, CA 92883	59	60	61	1	1	2	B (67)	NONE	61	0	0	58	3	0	57	4	0	56	5	2	55	6	2	54	7	2	--	--	--	--	--	--	56	5	2
M14.41	0 (ST14.08)	14		Residential / B	3	9193 Sydney Blue Cir, Corona, CA 92883	56	56	57	0	1	1	B (67)	NONE	57	0	0	57	0	0	57	0	0	57	0	0	57	0	0	57	0	0	--	--	--	--	--	--	57	0	0
M14.42 / ST14.10	-4 (ST14.10)	14		Residential / B	2	22480 Silver Dollar St, Corona, CA 92883	61	62	62	1	0	1	B (67)	NONE	62	0	0	60	2	0	58	4	0	57	5	2	56	6	2	55	7	2	--	--	--	--	--	--	56	6	2
M14.43	0 (ST14.08)	14		Residential / B	2	22473 Silver Dollar St, Corona, CA 92883	52	53	54	1	1	2	B (67)	NONE	54	0	0	54	0	0	54	0	0	54	0	0	54	0	0	54	0	0	--	--	--	--	--	--	54	0	0
M14.44	0 (ST14.11)	14		Residential / B	2	22460 Silver Dollar St, Corona, CA 92883	64	65	66	1	1	2	B (67)	A/E	66	0	0	63	3	0	61	5	2	60	6	2	59	7	2	58	8	2	--	--	--	--	--	--	59	7	2
M14.45	0 (ST14.08)	14		Residential / B	5	22441 Silver Dollar St, Corona, CA 92883	50	51	52	1	1	2	B (67)	NONE	52	0	0	52	0	0	52	0	0	52	0	0	51	1	0	51	1	0	--	--	--	--	--	--	51	1	0
M14.46 / ST14.11	0 (ST14.11)	14		Residential / B	2	22430 Silver Dollar St, Corona, CA 92883	65	66	66	1	0	1	B (67)	A/E	66	0	0	64	2	0	62	4	0	61	5	2	60	6	2	59	7	2	--	--	--	--	--	--	61	5	2
M14.47	0 (ST14.11)	14	SW1831 - Private Property	Park / C	1	22411 White Sage St, Corona, CA 92883	71	72	72	1	0	1	C (67)	A/E	71	1	0	68	4	0	66	6	1	65	7	1	64	8	1	63	9	1	--	--	--	--	--	--	66	6	1
M14.47A	0 (ST14.11)	14		Park / C	1	22411 White Sage St, Corona, CA 92883	68	69	69	1	0	1	C (67)	A/E	67	2	0	66	3	0	64	5	1	63	6	1	63	6	1	62	7	1	--	--	--	--	--	--	64	5	1
M14.47B	0 (ST14.11)	14		Park / C	1	22411 White Sage St, Corona, CA 92883	72	73	73	1	0	1	C (67)	A/E	69	4	0	68	5	1	65	8	1	64	9	1	63	10	1	62	11	1	--	--	--	--	--	--	65	8	1
M14.48 / ST14.09	0 (ST14.09)	14	SW1833 - Private Property	Residential / B	4	9056 Patina Ct, Corona, CA 92883	53	54	55	1	1	2	B (67)	NONE	55	0	0	55	0	0	55	0	0	55	0	0	55	0	0	55	0	0	--	--	--	--	--	--	55	0	0
M14.49	0 (ST14.09)	14		Residential / B	2	9066 Patina Ct, Corona, CA 92883	63	64	64	1	0	1	B (67)	NONE	64	0	0	62	2	0	61	3	0	60	4	0	59	5	2	59	5	2	--	--	--	--	--	--	60	4	0
M14.50	0 (ST14.12)	14		Residential / B	1	9081 Evonvale Dr, Corona, CA 92883	65	67	67	2	0	2	B (67)	A/E	67	0	0	65	2	0	63	4	0	62	5	1	61	6	1	60	7	1	--	--	--	--	--	--	62	5	1
M14.50A	0 (ST14.12)	14		Residential / B	1	9076 Patina Ct, Corona, CA 92883	68	69	69	1	0	1	B (67)	A/E	69	0	0	67	2	0	64	5	1	62	7	1	61	8	1	60	9	1	--	--	--	--	--	--	62	7	1
M14.51	0 (ST14.09)	14	SW1839 - Private Property	Residential / B	2	9054 Evonvale Dr, Corona, CA 92883	63	64	64	1	0	1	B (67)	NONE	64	0	0	62	2	0	61	3	0	59	5	2	58	6	2	58	6	2	--	--	--	--	--	--	58	6	2
M14.52 / ST14.12	0 (ST14.12)	14		Residential / B	4	22312 Hayworth Ct, Corona, CA 92883	65	66	66	1	0	1	B (67)	A/E	66	0	0	65	1	0	64	2	0	63	3	0	62	4	0	61	5	4	--	--	--	--	--	--	61	5	4
M14.53	0 (ST14.09)	14		Residential / B	4	22295 Hayworth Ct, Corona, CA 92883	54	55	57	1	2	3	B (67)	NONE	57	0	0	57	0	0	56	1	0	56	1	0	56	1	0	55	2	0	--	--	--	--	--	--	57	0	0
M14.54	0 (ST14.12)	14		Residential / B	1	22275 Hayworth Ct, Corona, CA 92883	66	67	68	1	1	2	B (67)	A/E	68	0	0	64	4	0	62	6	1	61	7	1	60	8	1	59	9	1	--	--	--	--	--	--	61	7	1
M14.55	-4 (ST14.13)	14		Storage / F	--	22223 Forest Boundary Rd, Corona, CA 92883	66	67	68	1	1	2	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.56	-4 (ST14.13)	14		Industrial / F	--	21965 Knabe Rd, Corona, CA 92883	66	67	68	1	1	2	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA																																										
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																															
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M14.57	-4 (ST14.13)	14		Industrial / F	--	22099 Knabe Rd, Corona, CA 92883	63	65	65	2	0	2	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.58 / ST14.13	-4 (ST14.13)	14		Office outdoor seating / E	1	22079 Knabe Rd, Corona, CA 92882	67	68	69	1	1	2	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.59	0 (ST14.14)	14		Banquet venue / E	1	8590 Bedford Motorway, Corona, CA 92882	52	53	53	1	0	1	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.60	0 (ST14.14)	14		Warehouse / F	--	21937 Knabe Rd, Corona, CA 92883	73	74	75	1	1	2	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.61 / ST14.14	0 (ST14.14)	14		Driveway / F	--	Badger Rd, Corona, CA 92883	69	71	70	2	-1	1	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.62	0 (ST14.14)	14		Residential / B	1	21761 Knabe Rd, Corona, CA 92883	64	65	65	1	0	1	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M14.63 / ST14.15	0 (ST14.15)	14	SW1875 - Private Property	Medical facilities outdoor seating / C	1	21634 Retreat Pkwy, Temescal Valley, CA 92883	71	72	72	1	0	1	C (67)	A/E	64	8	1	61	11	1	60	12	1	58	14	1	57	15	1	56	16	1	--	--	--	--	--	--	64	8	1
M14.63 / ST14.15	0 (ST14.15)	14	SW1881 - Mainline EOS	Medical facilities outdoor seating / C	1	21634 Retreat Pkwy, Temescal Valley, CA 92883	71	72	72	1	0	1	C (67)	A/E	71	1	0	71	1	0	71	1	0	71	1	0	71	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M14.63 / ST14.15	0 (ST14.15)	14	SW1877 + SW1881 Combination Mainline & Ramp EOS	Medical facilities outdoor seating / C	1	21634 Retreat Pkwy, Temescal Valley, CA 92883	71	72	72	1	0	1	C (67)	A/E	71	1	0	71	1	0	71	1	0	70	2	0	69	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M14.63 / ST14.15	0 (ST14.15)	14	SW1877 - Ramp EOS	Medical facilities outdoor seating / C	1	21634 Retreat Pkwy, Temescal Valley, CA 92883	71	72	72	1	0	1	C (67)	A/E	72	0	0	72	0	0	72	0	0	71	1	0	71	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M14.64	0 (ST14.15)	14		Undeveloped / G	--	N/A	69	70	70	1	0	1	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA																																													
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																		
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M15.01	0 (ST15.01)	15	SW1890A - Mainline EOS	Residential / B	1	2804 Fashion Dr, Corona, CA 92883	61	62	62	1	0	1	B (67)	NONE	62	0	0	62	0	0	61	1	0	61	1	0	61	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.02	0 (ST15.01)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	61	63	63	2	0	2	B (67)	NONE	62	1	0	62	1	0	62	1	0	62	1	0	62	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.03	0 (ST15.09)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	63	64	64	1	0	1	B (67)	NONE	63	1	0	63	1	0	63	1	0	63	1	0	63	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.04-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	62	64	64	2	0	2	B (67)	NONE	64	0	0	64	0	0	64	0	0	64	0	0	64	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.05-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	57	58	58	1	0	1	B (67)	NONE	57	1	0	57	1	0	56	2	0	56	2	0	56	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.06-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	57	58	58	1	0	1	B (67)	NONE	57	1	0	57	1	0	56	2	0	56	2	0	56	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.07-2	0 (ST15.10)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	56	57	57	1	0	1	B (67)	NONE	56	1	0	55	2	0	55	2	0	55	2	0	54	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.08-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	65	66	66	1	0	1	B (67)	A/E	65	1	0	65	1	0	65	1	0	64	2	0	64	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.09-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	60	61	61	1	0	1	B (67)	NONE	60	1	0	60	1	0	59	2	0	59	2	0	59	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.09-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	65	66	65	1	-1	0	B (67)	NONE	64	1	0	63	2	0	63	2	0	63	2	0	62	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.09-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	67	68	68	1	0	1	B (67)	A/E	66	2	0	65	3	0	65	3	0	65	3	0	65	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.10-2	0 (ST15.03)	15		Residential / B	6	2804 Fashion Dr, Corona, CA 92883	60	61	61	1	0	1	B (67)	NONE	59	2	0	58	3	0	58	3	0	57	4	0	57	4	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.11-2 / ST15.03	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	61	62	61	1	-1	0	B (67)	NONE	60	1	0	59	2	0	59	2	0	58	3	0	58	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.12-2	0 (ST15.10)	15	SW1890A - Mainline EOS	Residential / B	2	2804 Fashion Dr, Corona, CA 92883	61	62	62	1	0	1	B (67)	NONE	61	1	0	60	2	0	60	2	0	60	2	0	59	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.12-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	64	65	65	1	0	1	B (67)	NONE	64	1	0	63	2	0	63	2	0	63	2	0	62	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.12-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	67	68	68	1	0	1	B (67)	A/E	65	3	0	65	3	0	64	4	0	64	4	0	64	4	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.13-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	55	56	56	1	0	1	B (67)	NONE	56	0	0	56	0	0	56	0	0	56	0	0	56	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.13-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	58	59	58	1	-1	0	B (67)	NONE	58	0	0	58	0	0	58	0	0	58	0	0	58	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.13-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	60	61	60	1	-1	0	B (67)	NONE	60	0	0	60	0	0	59	1	0	59	1	0	59	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.14 / ST15.01	0 (ST15.01)	15		Residential / B	5	2804 Fashion Dr, Corona, CA 92883	58	59	59	1	0	1	B (67)	NONE	59	0	0	59	0	0	59	0	0	58	1	0	58	1	0	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA																																													
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																	
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M15.15	0 (ST15.09)	15	SW1890A - Mainline EOS	Residential / B	1	2804 Fashion Dr, Corona, CA 92883	57	58	58	1	0	1	B (67)	NONE	57	1	0	57	1	0	56	2	0	56	2	0	56	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.16-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	62	63	63	1	0	1	B (67)	NONE	61	2	0	60	3	0	60	3	0	59	4	0	59	4	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.16-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	64	65	65	1	0	1	B (67)	NONE	63	2	0	63	2	0	62	3	0	62	3	0	62	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.16-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	66	67	67	1	0	1	B (67)	A/E	65	2	0	64	3	0	64	3	0	64	3	0	63	4	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.17-2	0 (ST15.03)	15		Residential / B	3	2804 Fashion Dr, Corona, CA 92883	58	59	59	1	0	1	B (67)	NONE	57	2	0	57	2	0	56	3	0	56	3	0	55	4	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.18	0 (ST15.01)	15		Residential / B	7	2804 Fashion Dr, Corona, CA 92883	54	55	55	1	0	1	B (67)	NONE	54	1	0	54	1	0	54	1	0	53	2	0	53	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.19	0 (ST15.09)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	58	59	59	1	0	1	B (67)	NONE	57	2	0	57	2	0	57	2	0	56	3	0	56	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.20-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	62	63	63	1	0	1	B (67)	NONE	61	2	0	61	2	0	60	3	0	60	3	0	60	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.20-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	64	65	65	1	0	1	B (67)	NONE	63	2	0	63	2	0	62	3	0	62	3	0	62	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.20-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	66	67	66	1	-1	0	B (67)	A/E	64	2	0	64	2	0	64	2	0	63	3	0	63	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.21-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	46	47	47	1	0	1	B (67)	NONE	47	0	0	46	1	0	46	1	0	46	1	0	46	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.21-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	50	52	52	2	0	2	B (67)	NONE	51	1	0	51	1	0	51	1	0	51	1	0	51	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.21-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	56	57	58	1	1	2	B (67)	NONE	58	0	0	58	0	0	58	0	0	57	1	0	57	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.22-2	0 (ST15.10)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	55	56	57	1	1	2	B (67)	NONE	55	2	0	55	2	0	55	2	0	54	3	0	54	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.23-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	58	59	59	1	0	1	B (67)	NONE	58	1	0	57	2	0	57	2	0	57	2	0	57	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.24-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	56	58	58	2	0	2	B (67)	NONE	57	1	0	57	1	0	56	2	0	55	3	0	55	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.25-2	0 (ST15.03)	15		Residential / B	4	2804 Fashion Dr, Corona, CA 92883	53	55	55	2	0	2	B (67)	NONE	54	1	0	53	2	0	53	2	0	53	2	0	52	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.26	0 (ST15.01)	15		Apartment complex lawn / B	3	2804 Fashion Dr, Corona, CA 92883	61	62	61	1	-1	0	B (67)	NONE	61	0	0	61	0	0	60	1	0	61	0	0	61	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.27	0 (ST15.01)	15		Apartment complex basketball court / B	3	2804 Fashion Dr, Corona, CA 92883	60	61	60	1	-1	0	B (67)	NONE	60	0	0	60	0	0	59	1	0	59	1	0	59	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.28	0 (ST15.01)	15		Apartment complex pool / B	5	2804 Fashion Dr, Corona, CA 92883	56	57	57	1	0	1	B (67)	NONE	57	0	0	56	1	0	56	1	0	56	1	0	56	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.29-2	0 (ST15.10)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	54	55	56	1	1	2	B (67)	NONE	55	1	0	55	1	0	55	1	0	55	1	0	55	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.30-2	0 (ST15.03)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	54	55	56	1	1	2	B (67)	NONE	56	0	0	56	0	0	55	1	0	55	1	0	55	1	0	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA

Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR): 6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M15.31-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	58	59	60	1	1	2	B (67)	NONE	60	0	0	60	0	0	60	0	0	60	0	0	60	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.32-2	0 (ST15.03)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	60	61	59	1	-2	-1	B (67)	NONE	59	0	0	59	0	0	58	1	0	58	1	0	58	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.33-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	46	47	47	1	0	1	B (67)	NONE	47	0	0	46	1	0	46	1	0	46	1	0	45	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.33-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	51	52	52	1	0	1	B (67)	NONE	50	2	0	50	2	0	50	2	0	49	3	0	49	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.33-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	58	59	60	1	1	2	B (67)	NONE	57	3	0	57	3	0	56	4	0	56	4	0	56	4	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.34-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	61	63	62	2	-1	1	B (67)	NONE	60	2	0	60	2	0	60	2	0	59	3	0	59	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.34-3	0 (ST15.11)	15	SW1890A - Mainline EOS	Residential / B	2	2804 Fashion Dr, Corona, CA 92883	64	65	64	1	-1	0	B (67)	NONE	63	1	0	63	1	0	62	2	0	62	2	0	62	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.34-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	66	67	66	1	-1	0	B (67)	A/E	65	1	0	64	2	0	64	2	0	64	2	0	64	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.35	0 (ST15.02)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	55	56	55	1	-1	0	B (67)	NONE	55	0	0	55	0	0	55	0	0	55	0	0	55	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.36-2	0 (ST15.03)	15		Residential / B	4	2804 Fashion Dr, Corona, CA 92883	62	63	62	1	-1	0	B (67)	NONE	61	1	0	61	1	0	61	1	0	60	2	0	60	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.37	0 (ST15.02)	15	-	Residential / B	2	2804 Fashion Dr, Corona, CA 92883	57	58	57	1	-1	0	B (67)	NONE	56	1	0	56	1	0	56	1	0	56	1	0	56	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.38	0 (ST15.02)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	56	57	57	1	0	1	B (67)	NONE	56	1	0	57	0	0	56	1	0	55	2	0	55	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.39-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	60	62	61	2	-1	1	B (67)	NONE	60	1	0	60	1	0	59	2	0	59	2	0	59	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.39-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	63	65	64	2	-1	1	B (67)	NONE	63	1	0	63	1	0	62	2	0	62	2	0	62	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.39-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	65	67	66	2	-1	1	B (67)	A/E	65	1	0	64	2	0	64	2	0	64	2	0	64	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.40	0 (ST15.09)	15	SW1890A - Mainline EOS	Residential / B	1	2804 Fashion Dr, Corona, CA 92883	57	58	58	1	0	1	B (67)	NONE	57	1	0	57	1	0	57	1	0	57	1	0	56	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.41-2	0 (ST15.03)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	54	54	55	0	1	1	B (67)	NONE	55	0	0	55	0	0	55	0	0	55	0	0	55	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.42-2	0 (ST15.03)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	58	59	58	1	-1	0	B (67)	NONE	57	1	0	57	1	0	57	1	0	57	1	0	57	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.43-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	45	47	47	2	0	2	B (67)	NONE	46	1	0	46	1	0	46	1	0	46	1	0	45	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.43-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	48	49	50	1	1	2	B (67)	NONE	49	1	0	49	1	0	49	1	0	48	2	0	48	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.43-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	53	54	55	1	1	2	B (67)	NONE	54	1	0	53	2	0	53	2	0	53	2	0	53	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.44-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	60	61	61	1	0	1	B (67)	NONE	60	1	0	60	1	0	59	2	0	59	2	0	59	2	0	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA																																									
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																										
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M15.44-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	63	64	64	1	0	1	B (67)	NONE	63	1	0	63	1	0	63	1	0	63	1	0	62	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.44-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	65	67	66	2	-1	1	B (67)	A/E	65	1	0	65	1	0	65	1	0	65	1	0	64	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.45-2	0 (ST15.03)	15		Residential / B	4	2804 Fashion Dr, Corona, CA 92883	61	62	62	1	0	1	B (67)	NONE	62	0	0	62	0	0	62	0	0	62	0	0	61	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.46 / ST15.02	0 (ST15.02)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	55	56	55	1	-1	0	B (67)	NONE	55	0	0	55	0	0	54	1	0	54	1	0	54	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.47	0 (ST15.02)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	53	54	55	1	1	2	B (67)	NONE	55	0	0	54	1	0	54	1	0	54	1	0	54	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.48	0 (ST15.02)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	57	58	58	1	0	1	B (67)	NONE	58	0	0	58	0	0	57	1	0	57	1	0	57	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.49-3 / ST15.11	0 (ST15.11)	15	SW1890A - Mainline EOS	Residential / B	2	2804 Fashion Dr, Corona, CA 92883	63	64	64	1	0	1	B (67)	NONE	63	1	0	63	1	0	63	1	0	63	1	0	62	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.50-4 / ST15.12	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	65	67	66	2	-1	1	B (67)	A/E	65	1	0	65	1	0	65	1	0	65	1	0	65	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.51-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	54	55	55	1	0	1	B (67)	NONE	55	0	0	55	0	0	55	0	0	55	0	0	55	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.52-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	54	55	56	1	1	2	B (67)	NONE	56	0	0	56	0	0	56	0	0	56	0	0	56	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.53-2	0 (ST15.03)	15		Residential / B	3	2804 Fashion Dr, Corona, CA 92883	51	52	53	1	1	2	B (67)	NONE	53	0	0	53	0	0	52	1	0	52	1	0	52	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.54 / ST15.09	0 (ST15.09)	15	-	Residential / B	1	2804 Fashion Dr, Corona, CA 92883	56	57	58	1	1	2	B (67)	NONE	58	0	0	58	0	0	57	1	0	57	1	0	57	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.55-2 / ST15.10	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	58	60	60	2	0	2	B (67)	NONE	59	1	0	59	1	0	59	1	0	59	1	0	59	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.56-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	55	56	56	1	0	1	B (67)	NONE	56	0	0	56	0	0	55	1	0	55	1	0	55	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.57-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	61	62	62	1	0	1	B (67)	NONE	62	0	0	62	0	0	61	1	0	61	1	0	61	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.58-2	0 (ST15.03)	15	SW1890A - Mainline EOS	Residential / B	2	2804 Fashion Dr, Corona, CA 92883	56	57	58	1	1	2	B (67)	NONE	58	0	0	57	1	0	57	1	0	57	1	0	57	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.59-2	0 (ST15.10)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	53	54	54	1	0	1	B (67)	NONE	54	0	0	53	1	0	53	1	0	52	2	0	52	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.60	0 (ST15.02)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	52	53	53	1	0	1	B (67)	NONE	54	-1	0	53	0	0	53	0	0	53	0	0	53	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.61-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	53	54	56	1	2	3	B (67)	NONE	56	0	0	56	0	0	55	1	0	55	1	0	55	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.62	0 (ST15.02)	15		Residential / B	3	2804 Fashion Dr, Corona, CA 92883	56	57	58	1	1	2	B (67)	NONE	58	0	0	58	0	0	58	0	0	58	0	0	58	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.63-2	0 (ST15.10)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	60	61	61	1	0	1	B (67)	NONE	61	0	0	61	0	0	61	0	0	61	0	0	61	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.64	-4 (ST15.04)	15		Shopping Mall Playground / C	1	2780 Cabot Dr, Corona, CA 92883	56	57	58	1	1	2	C (67)	NONE	58	0	0	58	0	0	58	0	0	58	0	0	58	0	0	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA																																													
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																	
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M15.01	0 (ST15.01)	15	SW1890B - Ramp EOS	Residential / B	1	2804 Fashion Dr, Corona, CA 92883	61	62	62	1	0	1	B (67)	NONE	62	0	0	62	0	0	62	0	0	62	0	0	62	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.02	0 (ST15.01)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	61	63	63	2	0	2	B (67)	NONE	63	0	0	63	0	0	63	0	0	63	0	0	63	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.03	0 (ST15.09)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	63	64	64	1	0	1	B (67)	NONE	64	0	0	64	0	0	64	0	0	64	0	0	64	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.04-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	62	64	64	2	0	2	B (67)	NONE	64	0	0	64	0	0	64	0	0	64	0	0	64	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.05-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	57	58	58	1	0	1	B (67)	NONE	58	0	0	58	0	0	57	1	0	57	1	0	56	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.06-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	57	58	58	1	0	1	B (67)	NONE	58	0	0	58	0	0	57	1	0	57	1	0	56	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.07-2	0 (ST15.10)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	56	57	57	1	0	1	B (67)	NONE	56	1	0	56	1	0	56	1	0	55	2	0	55	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.08-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	65	66	66	1	0	1	B (67)	A/E	66	0	0	66	0	0	65	1	0	65	1	0	64	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.09-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	60	61	61	1	0	1	B (67)	NONE	61	0	0	61	0	0	61	0	0	61	0	0	60	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.09-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	65	66	65	1	-1	0	B (67)	NONE	65	0	0	65	0	0	65	0	0	65	0	0	65	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.09-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	67	68	68	1	0	1	B (67)	A/E	68	0	0	67	1	0	67	1	0	67	1	0	67	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.10-2	0 (ST15.03)	15		Residential / B	6	2804 Fashion Dr, Corona, CA 92883	60	61	61	1	0	1	B (67)	NONE	61	0	0	61	0	0	60	1	0	60	1	0	59	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.11-2 / ST15.03	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	61	62	61	1	-1	0	B (67)	NONE	61	0	0	61	0	0	61	0	0	61	0	0	59	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.12-2	0 (ST15.10)	15	SW1890B - Ramp EOS	Residential / B	2	2804 Fashion Dr, Corona, CA 92883	61	62	62	1	0	1	B (67)	NONE	62	0	0	61	1	0	61	1	0	61	1	0	60	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.12-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	64	65	65	1	0	1	B (67)	NONE	65	0	0	65	0	0	65	0	0	65	0	0	64	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.12-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	67	68	68	1	0	1	B (67)	A/E	67	1	0	67	1	0	67	1	0	66	2	0	66	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.13-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	55	56	56	1	0	1	B (67)	NONE	55	1	0	54	2	0	53	3	0	52	4	0	52	4	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.13-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	58	59	58	1	-1	0	B (67)	NONE	56	2	0	55	3	0	55	3	0	54	4	0	54	4	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.13-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	60	61	60	1	-1	0	B (67)	NONE	59	1	0	58	2	0	58	2	0	57	3	0	57	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.14 / ST15.01	0 (ST15.01)	15		Residential / B	5	2804 Fashion Dr, Corona, CA 92883	58	59	59	1	0	1	B (67)	NONE	59	0	0	59	0	0	58	1	0	58	1	0	57	2	0	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA																																						
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																											
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M15.15	0 (ST15.09)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	57	58	58	1	0	1	B (67)	NONE	58	0	0	58	0	0	58	0	0	58	0	0	57	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.16-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	62	63	63	1	0	1	B (67)	NONE	63	0	0	62	1	0	62	1	0	62	1	0	62	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.16-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	64	65	65	1	0	1	B (67)	NONE	65	0	0	65	0	0	64	1	0	64	1	0	64	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.16-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	66	67	67	1	0	1	B (67)	A/E	66	1	0	66	1	0	66	1	0	65	2	0	65	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.17-2	0 (ST15.03)	15		Residential / B	3	2804 Fashion Dr, Corona, CA 92883	58	59	59	1	0	1	B (67)	NONE	59	0	0	59	0	0	59	0	0	58	1	0	57	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.18	0 (ST15.01)	15		Residential / B	7	2804 Fashion Dr, Corona, CA 92883	54	55	55	1	0	1	B (67)	NONE	55	0	0	55	0	0	54	1	0	54	1	0	53	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.19	0 (ST15.09)	15	SW1890B - Ramp EOS	Residential / B	1	2804 Fashion Dr, Corona, CA 92883	58	59	59	1	0	1	B (67)	NONE	58	1	0	58	1	0	58	1	0	58	1	0	57	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.20-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	62	63	63	1	0	1	B (67)	NONE	62	1	0	62	1	0	62	1	0	61	2	0	61	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.20-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	64	65	65	1	0	1	B (67)	NONE	64	1	0	64	1	0	64	1	0	64	1	0	63	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.20-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	66	67	66	1	-1	0	B (67)	A/E	66	0	0	65	1	0	65	1	0	65	1	0	65	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.21-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	46	47	47	1	0	1	B (67)	NONE	47	0	0	47	0	0	47	0	0	47	0	0	47	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.21-3	0 (ST15.11)	15	-	Residential / B	2	2804 Fashion Dr, Corona, CA 92883	50	52	52	2	0	2	B (67)	NONE	52	0	0	52	0	0	52	0	0	52	0	0	51	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.21-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	56	57	58	1	1	2	B (67)	NONE	58	0	0	58	0	0	58	0	0	58	0	0	58	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.22-2	0 (ST15.10)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	55	56	57	1	1	2	B (67)	NONE	57	0	0	57	0	0	57	0	0	57	0	0	56	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.23-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	58	59	59	1	0	1	B (67)	NONE	59	0	0	58	1	0	57	2	0	57	2	0	56	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.24-2	0 (ST15.03)	15	SW1890B - Ramp EOS	Residential / B	1	2804 Fashion Dr, Corona, CA 92883	56	58	58	2	0	2	B (67)	NONE	58	0	0	57	1	0	57	1	0	56	2	0	55	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.25-2	0 (ST15.03)	15		Residential / B	4	2804 Fashion Dr, Corona, CA 92883	53	55	55	2	0	2	B (67)	NONE	55	0	0	55	0	0	55	0	0	54	1	0	54	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.26	0 (ST15.01)	15		Apartment complex lawn / B	3	2804 Fashion Dr, Corona, CA 92883	61	62	61	1	-1	0	B (67)	NONE	59	2	0	58	3	0	57	4	0	57	4	0	57	4	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.27	0 (ST15.01)	15		Apartment complex basketball court / B	3	2804 Fashion Dr, Corona, CA 92883	60	61	60	1	-1	0	B (67)	NONE	59	1	0	57	3	0	56	4	0	56	4	0	55	5	3	--	--	--	--	--	--	--	--	--	--	--	--
M15.28	0 (ST15.01)	15		Apartment complex pool / B	5	2804 Fashion Dr, Corona, CA 92883	56	57	57	1	0	1	B (67)	NONE	57	0	0	57	0	0	56	1	0	55	2	0	55	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.29-2	0 (ST15.10)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	54	55	56	1	1	2	B (67)	NONE	55	1	0	55	1	0	55	1	0	55	1	0	54	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.30-2	0 (ST15.03)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	54	55	56	1	1	2	B (67)	NONE	56	0	0	55	1	0	54	2	0	54	2	0	54	2	0	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA																																									
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																										
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M15.31-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	58	59	60	1	1	2	B (67)	NONE	59	1	0	58	2	0	58	2	0	57	3	0	57	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.32-2	0 (ST15.03)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	60	61	59	1	-2	-1	B (67)	NONE	58	1	0	57	2	0	56	3	0	55	4	0	55	4	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.33-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	46	47	47	1	0	1	B (67)	NONE	47	0	0	47	0	0	47	0	0	47	0	0	47	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.33-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	51	52	52	1	0	1	B (67)	NONE	52	0	0	52	0	0	52	0	0	51	1	0	51	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.33-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	58	59	60	1	1	2	B (67)	NONE	59	1	0	59	1	0	59	1	0	59	1	0	59	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.34-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	61	63	62	2	-1	1	B (67)	NONE	61	1	0	61	1	0	61	1	0	60	2	0	60	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.34-3	0 (ST15.11)	15	SW1890B - Ramp EOS	Residential / B	2	2804 Fashion Dr, Corona, CA 92883	64	65	64	1	-1	0	B (67)	NONE	64	0	0	63	1	0	63	1	0	63	1	0	62	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.34-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	66	67	66	1	-1	0	B (67)	A/E	65	1	0	65	1	0	65	1	0	64	2	0	64	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.35	0 (ST15.02)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	55	56	55	1	-1	0	B (67)	NONE	55	0	0	54	1	0	53	2	0	52	3	0	52	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.36-2	0 (ST15.03)	15		Residential / B	4	2804 Fashion Dr, Corona, CA 92883	62	63	62	1	-1	0	B (67)	NONE	60	2	0	60	2	0	58	4	0	57	5	4	57	5	4	--	--	--	--	--	--	--	--	--	--	--	--
M15.37	0 (ST15.02)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	57	58	57	1	-1	0	B (67)	NONE	55	2	0	54	3	0	53	4	0	53	4	0	53	4	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.38	0 (ST15.02)	15	-	Residential / B	2	2804 Fashion Dr, Corona, CA 92883	56	57	57	1	0	1	B (67)	NONE	57	0	0	56	1	0	55	2	0	55	2	0	54	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.39-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	60	62	61	2	-1	1	B (67)	NONE	61	0	0	61	0	0	61	0	0	60	1	0	60	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.39-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	63	65	64	2	-1	1	B (67)	NONE	64	0	0	63	1	0	63	1	0	62	2	0	62	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.39-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	65	67	66	2	-1	1	B (67)	A/E	65	1	0	65	1	0	64	2	0	64	2	0	64	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.40	0 (ST15.09)	15	SW1890B - Ramp EOS	Residential / B	1	2804 Fashion Dr, Corona, CA 92883	57	58	58	1	0	1	B (67)	NONE	58	0	0	58	0	0	58	0	0	57	1	0	57	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.41-2	0 (ST15.03)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	54	54	55	0	1	1	B (67)	NONE	55	0	0	55	0	0	54	1	0	54	1	0	54	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.42-2	0 (ST15.03)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	58	59	58	1	-1	0	B (67)	NONE	57	1	0	56	2	0	56	2	0	55	3	0	55	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.43-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	45	47	47	2	0	2	B (67)	NONE	47	0	0	47	0	0	46	1	0	46	1	0	46	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.43-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	48	49	50	1	1	2	B (67)	NONE	49	1	0	49	1	0	49	1	0	48	2	0	48	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.43-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	53	54	55	1	1	2	B (67)	NONE	54	1	0	54	1	0	54	1	0	54	1	0	54	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.44-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	60	61	61	1	0	1	B (67)	NONE	60	1	0	60	1	0	60	1	0	60	1	0	59	2	0	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA																																													
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																		
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M15.44-3	0 (ST15.11)	15	SW1880B - Ramp EOS	Residential / B	2	2804 Fashion Dr, Corona, CA 92883	63	64	64	1	0	1	B (67)	NONE	63	1	0	63	1	0	63	1	0	62	2	0	62	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.44-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	65	67	66	2	-1	1	B (67)	A/E	65	1	0	65	1	0	64	2	0	64	2	0	64	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.45-2	0 (ST15.03)	15		Residential / B	4	2804 Fashion Dr, Corona, CA 92883	61	62	62	1	0	1	B (67)	NONE	60	2	0	60	2	0	59	3	0	58	4	0	57	5	4	--	--	--	--	--	--	--	--	--	--	--	--
M15.46 / ST15.02	0 (ST15.02)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	55	56	55	1	-1	0	B (67)	NONE	54	1	0	54	1	0	53	2	0	53	2	0	52	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.47	0 (ST15.02)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	53	54	55	1	1	2	B (67)	NONE	55	0	0	55	0	0	53	2	0	53	2	0	54	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.48	0 (ST15.02)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	57	58	58	1	0	1	B (67)	NONE	57	1	0	57	1	0	56	2	0	55	3	0	55	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.49-3 / ST15.11	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	63	64	64	1	0	1	B (67)	NONE	62	2	0	62	2	0	62	2	0	62	2	0	61	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.50-4 / ST15.12	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	65	67	66	2	-1	1	B (67)	A/E	65	1	0	65	1	0	64	2	0	64	2	0	64	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.51-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	54	55	55	1	0	1	B (67)	NONE	55	0	0	54	1	0	54	1	0	54	1	0	53	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.52-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	54	55	56	1	1	2	B (67)	NONE	56	0	0	56	0	0	55	1	0	55	1	0	55	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.53-2	0 (ST15.03)	15		Residential / B	3	2804 Fashion Dr, Corona, CA 92883	51	52	53	1	1	2	B (67)	NONE	53	0	0	53	0	0	52	1	0	52	1	0	51	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.54 / ST15.09	0 (ST15.09)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	56	57	58	1	1	2	B (67)	NONE	57	1	0	57	1	0	57	1	0	57	1	0	56	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.55-2 / ST15.10	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	58	60	60	2	0	2	B (67)	NONE	59	1	0	59	1	0	58	2	0	58	2	0	58	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.56-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	55	56	56	1	0	1	B (67)	NONE	55	1	0	54	2	0	53	3	0	53	3	0	53	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.57-2	0 (ST15.03)	15	SW1890B - Ramp EOS	Residential / B	1	2804 Fashion Dr, Corona, CA 92883	61	62	62	1	0	1	B (67)	NONE	60	2	0	59	3	0	58	4	0	57	5	1	57	5	1	--	--	--	--	--	--	--	--	--	--	--	--
M15.58-2	0 (ST15.03)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	56	57	58	1	1	2	B (67)	NONE	57	1	0	56	2	0	56	2	0	57	1	0	56	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.59-2	0 (ST15.10)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	53	54	54	1	0	1	B (67)	NONE	54	0	0	54	0	0	54	0	0	53	1	0	53	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.60	0 (ST15.02)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	52	53	53	1	0	1	B (67)	NONE	52	1	0	52	1	0	52	1	0	51	2	0	52	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.61-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	53	54	56	1	2	3	B (67)	NONE	55	1	0	55	1	0	55	1	0	55	1	0	55	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.62	0 (ST15.02)	15		Residential / B	3	2804 Fashion Dr, Corona, CA 92883	56	57	58	1	1	2	B (67)	NONE	57	1	0	57	1	0	57	1	0	57	1	0	57	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.63-2	0 (ST15.10)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	60	61	61	1	0	1	B (67)	NONE	61	0	0	61	0	0	61	0	0	61	0	0	60	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M15.64	-4 (ST15.04)	15		Shopping Mall Playground / C	1	2780 Cabot Dr, Corona, CA 92883	56	57	58	1	1	2	C (67)	NONE	58	0	0	58	0	0	58	0	0	58	0	0	58	0	0	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - $L_{eq}(h)$, dBA																																												
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, $L_{eq}(h)$, dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																	
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR
M15.01	0 (ST15.01)	15	SW1890C - ROW	Residential / B	1	2804 Fashion Dr, Corona, CA 92883	61	62	62	1	0	1	B (67)	NONE	62	0	0	62	0	0	62	0	0	62	0	0	62	0	0	62	0	0	62	0	0	62	0	0	--	--	--
M15.02	0 (ST15.01)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	61	63	63	2	0	2	B (67)	NONE	63	0	0	63	0	0	63	0	0	63	0	0	63	0	0	62	1	0	62	1	0	62	1	0	--	--	--
M15.03	0 (ST15.09)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	63	64	64	1	0	1	B (67)	NONE	64	0	0	64	0	0	64	0	0	64	0	0	64	0	0	64	0	0	64	0	0	64	0	0	--	--	--
M15.04-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	62	64	64	2	0	2	B (67)	NONE	64	0	0	64	0	0	64	0	0	64	0	0	64	0	0	64	0	0	64	0	0	64	0	0	--	--	--
M15.05-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	57	58	58	1	0	1	B (67)	NONE	57	1	0	57	1	0	56	2	0	56	2	0	56	2	0	55	3	0	55	3	0	55	3	0	--	--	--
M15.06-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	57	58	58	1	0	1	B (67)	NONE	58	0	0	57	1	0	57	1	0	56	2	0	56	2	0	56	2	0	56	2	0	56	2	0	--	--	--
M15.07-2	0 (ST15.10)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	56	57	57	1	0	1	B (67)	NONE	56	1	0	56	1	0	56	1	0	55	2	0	55	2	0	55	2	0	54	3	0	54	3	0	--	--	--
M15.08-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	65	66	66	1	0	1	B (67)	A/E	64	2	0	64	2	0	63	3	0	63	3	0	63	3	0	63	3	0	62	4	0	62	4	0	--	--	--
M15.09-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	60	61	61	1	0	1	B (67)	NONE	61	0	0	61	0	0	60	1	0	60	1	0	60	1	0	59	2	0	58	3	0	58	3	0	--	--	--
M15.09-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	65	66	65	1	-1	0	B (67)	NONE	65	0	0	65	0	0	65	0	0	65	0	0	64	1	0	64	1	0	63	2	0	62	3	0	--	--	--
M15.09-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	67	68	68	1	0	1	B (67)	A/E	67	1	0	67	1	0	67	1	0	67	1	0	67	1	0	67	1	0	66	2	0	66	2	0	--	--	--
M15.10-2	0 (ST15.03)	15		Residential / B	6	2804 Fashion Dr, Corona, CA 92883	60	61	61	1	0	1	B (67)	NONE	60	1	0	59	2	0	58	3	0	57	4	0	57	4	0	56	5	6	55	6	6	55	6	6	--	--	--
M15.11-2 / ST15.03	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	61	62	61	1	-1	0	B (67)	NONE	61	0	0	60	1	0	59	2	0	58	3	0	58	3	0	57	4	0	57	4	0	57	4	0	--	--	--
M15.12-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	61	62	62	1	0	1	B (67)	NONE	61	1	0	61	1	0	61	1	0	60	2	0	59	3	0	59	3	0	58	4	0	58	4	0	--	--	--
M15.12-3	0 (ST15.11)	15	SW1890C - ROW	Residential / B	2	2804 Fashion Dr, Corona, CA 92883	64	65	65	1	0	1	B (67)	NONE	65	0	0	65	0	0	65	0	0	64	1	0	64	1	0	63	2	0	63	2	0	62	3	0	--	--	--
M15.12-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	67	68	68	1	0	1	B (67)	A/E	67	1	0	67	1	0	66	2	0	66	2	0	66	2	0	66	2	0	65	3	0	65	3	0	--	--	--
M15.13-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	55	56	56	1	0	1	B (67)	NONE	54	2	0	53	3	0	52	4	0	52	4	0	51	5	2	51	5	2	51	5	2	51	5	2	--	--	--
M15.13-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	58	59	58	1	-1	0	B (67)	NONE	56	2	0	55	3	0	54	4	0	53	5	2	53	5	2	53	5	2	53	5	2	52	6	2	--	--	--
M15.13-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	60	61	60	1	-1	0	B (67)	NONE	58	2	0	58	2	0	57	3	0	56	4	0	56	4	0	56	4	0	56	4	0	56	4	0	--	--	--
M15.14 / ST15.01	0 (ST15.01)	15		Residential / B	5	2804 Fashion Dr, Corona, CA 92883	58	59	59	1	0	1	B (67)	NONE	59	0	0	58	1	0	57	2	0	57	2	0	57	2	0	57	2	0	57	2	0	56	3	0	--	--	--
M15.15	0 (ST15.09)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	57	58	58	1	0	1	B (67)	NONE	58	0	0	58	0	0	57	1	0	57	1	0	56	2	0	56	2	0	56	2	0	55	3	0	--	--	--
M15.16-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	62	63	63	1	0	1	B (67)	NONE	62	1	0	62	1	0	62	1	0	61	2	0	60	3	0	60	3	0	60	3	0	59	4	0	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - $L_{eq}(h)$, dBA																																											
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, $L_{eq}(h)$, dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																															
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR
M15.16-3	0 (ST15.11)	15	SW1890C - ROW	Residential / B	2	2804 Fashion Dr, Corona, CA 92883	64	65	65	1	0	1	B (67)	NONE	65	0	0	64	1	0	64	1	0	64	1	0	63	2	0	62	3	0	62	3	0	62	3	0	--	--	--
M15.16-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	66	67	67	1	0	1	B (67)	A/E	66	1	0	66	1	0	66	1	0	65	2	0	65	2	0	65	2	0	64	3	0	64	3	0	--	--	--
M15.17-2	0 (ST15.03)	15		Residential / B	3	2804 Fashion Dr, Corona, CA 92883	58	59	59	1	0	1	B (67)	NONE	58	1	0	58	1	0	57	2	0	56	3	0	56	3	0	55	4	0	55	4	0	55	4	0	--	--	--
M15.18	0 (ST15.01)	15		Residential / B	7	2804 Fashion Dr, Corona, CA 92883	54	55	55	1	0	1	B (67)	NONE	55	0	0	55	0	0	54	1	0	53	2	0	53	2	0	53	2	0	53	2	0	53	2	0	--	--	--
M15.19	0 (ST15.09)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	58	59	59	1	0	1	B (67)	NONE	58	1	0	58	1	0	57	2	0	57	2	0	56	3	0	56	3	0	56	3	0	56	3	0	--	--	--
M15.20-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	62	63	63	1	0	1	B (67)	NONE	62	1	0	62	1	0	62	1	0	61	2	0	60	3	0	60	3	0	59	4	0	59	4	0	--	--	--
M15.20-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	64	65	65	1	0	1	B (67)	NONE	64	1	0	64	1	0	64	1	0	63	2	0	63	2	0	62	3	0	62	3	0	61	4	0	--	--	--
M15.20-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	66	67	66	1	-1	0	B (67)	A/E	65	1	0	65	1	0	65	1	0	65	1	0	65	1	0	64	2	0	64	2	0	63	3	0	--	--	--
M15.21-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	46	47	47	1	0	1	B (67)	NONE	47	0	0	47	0	0	47	0	0	47	0	0	46	1	0	46	1	0	46	1	0	46	1	0	--	--	--
M15.21-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	50	52	52	2	0	2	B (67)	NONE	52	0	0	51	1	0	51	1	0	51	1	0	51	1	0	51	1	0	51	1	0	51	1	0	--	--	--
M15.21-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	56	57	58	1	1	2	B (67)	NONE	58	0	0	58	0	0	57	1	0	57	1	0	57	1	0	57	1	0	57	1	0	57	1	0	--	--	--
M15.22-2	0 (ST15.10)	15	-	Residential / B	1	2804 Fashion Dr, Corona, CA 92883	55	56	57	1	1	2	B (67)	NONE	57	0	0	57	0	0	57	0	0	56	1	0	56	1	0	56	1	0	55	2	0	55	2	0	--	--	--
M15.23-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	58	59	59	1	0	1	B (67)	NONE	58	1	0	57	2	0	56	3	0	56	3	0	55	4	0	55	4	0	55	4	0	55	4	0	--	--	--
M15.24-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	56	58	58	2	0	2	B (67)	NONE	56	2	0	56	2	0	55	3	0	55	3	0	54	4	0	54	4	0	54	4	0	54	4	0	--	--	--
M15.25-2	0 (ST15.03)	15		Residential / B	4	2804 Fashion Dr, Corona, CA 92883	53	55	55	2	0	2	B (67)	NONE	55	0	0	55	0	0	54	1	0	54	1	0	53	2	0	53	2	0	53	2	0	52	3	0	--	--	--
M15.26	0 (ST15.01)	15	SW1890C - ROW	Apartment complex lawn / B	3	2804 Fashion Dr, Corona, CA 92883	61	62	61	1	-1	0	B (67)	NONE	59	2	0	58	3	0	57	4	0	57	4	0	57	4	0	57	4	0	57	4	0	57	4	0	--	--	--
M15.27	0 (ST15.01)	15		Apartment complex basketball court / B	3	2804 Fashion Dr, Corona, CA 92883	60	61	60	1	-1	0	B (67)	NONE	58	2	0	56	4	0	56	4	0	55	5	3	55	5	3	55	5	3	55	5	3	55	5	3	--	--	--
M15.28	0 (ST15.01)	15		Apartment complex pool / B	5	2804 Fashion Dr, Corona, CA 92883	56	57	57	1	0	1	B (67)	NONE	57	0	0	57	0	0	56	1	0	55	2	0	54	3	0	54	3	0	54	3	0	54	3	0	--	--	--
M15.29-2	0 (ST15.10)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	54	55	56	1	1	2	B (67)	NONE	55	1	0	55	1	0	54	2	0	54	2	0	54	2	0	54	2	0	54	2	0	54	2	0	--	--	--
M15.30-2	0 (ST15.03)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	54	55	56	1	1	2	B (67)	NONE	55	1	0	55	1	0	54	2	0	54	2	0	53	3	0	53	3	0	53	3	0	53	3	0	--	--	--
M15.31-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	58	59	60	1	1	2	B (67)	NONE	58	2	0	57	3	0	57	3	0	56	4	0	56	4	0	56	4	0	56	4	0	56	4	0	--	--	--
M15.32-2	0 (ST15.03)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	60	61	59	1	-2	-1	B (67)	NONE	58	1	0	56	3	0	55	4	0	55	4	0	54	5	2	54	5	2	54	5	2	54	5	2	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA

Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR): 6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M15.33-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	46	47	47	1	0	1	B (67)	NONE	47	0	0	47	0	0	47	0	0	47	0	0	46	1	0	46	1	0	46	1	0	46	1	0	--	--	--
M15.33-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	51	52	52	1	0	1	B (67)	NONE	52	0	0	51	1	0	51	1	0	51	1	0	51	1	0	51	1	0	51	1	0	51	1	0	--	--	--
M15.33-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	58	59	60	1	1	2	B (67)	NONE	59	1	0	59	1	0	59	1	0	59	1	0	59	1	0	59	1	0	59	1	0	58	2	0	--	--	--
M15.34-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	61	63	62	2	-1	1	B (67)	NONE	61	1	0	61	1	0	60	2	0	59	3	0	58	4	0	58	4	0	58	4	0	58	4	0	--	--	--
M15.34-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	64	65	64	1	-1	0	B (67)	NONE	64	0	0	63	1	0	63	1	0	62	2	0	62	2	0	61	3	0	61	3	0	61	3	0	--	--	--
M15.34-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	66	67	66	1	-1	0	B (67)	A/E	65	1	0	64	2	0	64	2	0	64	2	0	63	3	0	63	3	0	63	3	0	62	4	0	--	--	--
M15.35	0 (ST15.02)	15	SW1890C - ROW	Residential / B	2	2804 Fashion Dr, Corona, CA 92883	55	56	55	1	-1	0	B (67)	NONE	54	1	0	53	2	0	52	3	0	52	3	0	52	3	0	52	3	0	52	3	0	51	4	0	--	--	--
M15.36-2	0 (ST15.03)	15		Residential / B	4	2804 Fashion Dr, Corona, CA 92883	62	63	62	1	-1	0	B (67)	NONE	60	2	0	59	3	0	58	4	0	57	5	4	56	6	4	56	6	4	56	6	4	56	6	4	--	--	--
M15.37	0 (ST15.02)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	57	58	57	1	-1	0	B (67)	NONE	54	3	0	54	3	0	53	4	0	53	4	0	53	4	0	53	4	0	53	4	0	53	4	0	--	--	--
M15.38	0 (ST15.02)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	56	57	57	1	0	1	B (67)	NONE	57	0	0	56	1	0	55	2	0	55	2	0	54	3	0	54	3	0	54	3	0	54	3	0	--	--	--
M15.39-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	60	62	61	2	-1	1	B (67)	NONE	61	0	0	61	0	0	60	1	0	59	2	0	58	3	0	58	3	0	58	3	0	58	3	0	--	--	--
M15.39-3	0 (ST15.11)	15	-	Residential / B	2	2804 Fashion Dr, Corona, CA 92883	63	65	64	2	-1	1	B (67)	NONE	63	1	0	63	1	0	63	1	0	62	2	0	61	3	0	61	3	0	61	3	0	61	3	0	--	--	--
M15.39-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	65	67	66	2	-1	1	B (67)	A/E	65	1	0	64	2	0	64	2	0	63	3	0	63	3	0	63	3	0	62	4	0	62	4	0	--	--	--
M15.40	0 (ST15.09)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	57	58	58	1	0	1	B (67)	NONE	58	0	0	57	1	0	57	1	0	56	2	0	56	2	0	56	2	0	56	2	0	56	2	0	--	--	--
M15.41-2	0 (ST15.03)	15	SW1890C - ROW	Residential / B	2	2804 Fashion Dr, Corona, CA 92883	54	54	55	0	1	1	B (67)	NONE	55	0	0	55	0	0	54	1	0	54	1	0	53	2	0	53	2	0	53	2	0	53	2	0	--	--	--
M15.42-2	0 (ST15.03)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	58	59	58	1	-1	0	B (67)	NONE	57	1	0	56	2	0	55	3	0	55	3	0	54	4	0	54	4	0	54	4	0	54	4	0	--	--	--
M15.43-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	45	47	47	2	0	2	B (67)	NONE	47	0	0	46	1	0	46	1	0	46	1	0	46	1	0	46	1	0	46	1	0	45	2	0	--	--	--
M15.43-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	48	49	50	1	1	2	B (67)	NONE	49	1	0	49	1	0	48	2	0	48	2	0	48	2	0	48	2	0	48	2	0	47	3	0	--	--	--
M15.43-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	53	54	55	1	1	2	B (67)	NONE	54	1	0	54	1	0	54	1	0	54	1	0	53	2	0	53	2	0	53	2	0	53	2	0	--	--	--
M15.44-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	60	61	61	1	0	1	B (67)	NONE	60	1	0	60	1	0	59	2	0	59	2	0	58	3	0	58	3	0	58	3	0	58	3	0	--	--	--
M15.44-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	63	64	64	1	0	1	B (67)	NONE	63	1	0	62	2	0	62	2	0	62	2	0	61	3	0	61	3	0	61	3	0	60	4	0	--	--	--
M15.44-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	65	67	66	2	-1	1	B (67)	A/E	65	1	0	64	2	0	64	2	0	63	3	0	63	3	0	63	3	0	62	4	0	62	4	0	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - $L_{eq}(h)$, dBA																																												
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, $L_{eq}(h)$, dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																	
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR
M15.45-2	0 (ST15.03)	15	SW1890C - ROW	Residential / B	4	2804 Fashion Dr, Corona, CA 92883	61	62	62	1	0	1	B (67)	NONE	59	3	0	58	4	0	57	5	4	56	6	4	56	6	4	56	6	4	56	6	4	56	6	4	--	--	--
M15.46 / ST15.02	0 (ST15.02)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	55	56	55	1	-1	0	B (67)	NONE	54	1	0	55	0	0	55	0	0	55	0	0	55	0	0	55	0	0	55	0	0	54	1	0	--	--	--
M15.47	0 (ST15.02)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	53	54	55	1	1	2	B (67)	NONE	54	1	0	54	1	0	54	1	0	54	1	0	53	2	0	53	2	0	53	2	0	53	2	0	--	--	--
M15.48	0 (ST15.02)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	57	58	58	1	0	1	B (67)	NONE	57	1	0	56	2	0	55	3	0	55	3	0	55	3	0	55	3	0	55	3	0	55	3	0	--	--	--
M15.49-3 / ST15.11	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	63	64	64	1	0	1	B (67)	NONE	62	2	0	62	2	0	61	3	0	61	3	0	61	3	0	61	3	0	60	4	0	60	4	0	--	--	--
M15.50-4 / ST15.12	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	65	67	66	2	-1	1	B (67)	A/E	65	1	0	64	2	0	64	2	0	63	3	0	63	3	0	63	3	0	62	4	0	62	4	0	--	--	--
M15.51-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	54	55	55	1	0	1	B (67)	NONE	54	1	0	55	0	0	54	1	0	53	2	0	53	2	0	52	3	0	52	3	0	52	3	0	--	--	--
M15.52-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	54	55	56	1	1	2	B (67)	NONE	55	1	0	55	1	0	55	1	0	54	2	0	54	2	0	54	2	0	54	2	0	53	3	0	--	--	--
M15.53-2	0 (ST15.03)	15		Residential / B	3	2804 Fashion Dr, Corona, CA 92883	51	52	53	1	1	2	B (67)	NONE	52	1	0	52	1	0	52	1	0	51	2	0	51	2	0	51	2	0	51	2	0	50	3	0	--	--	--
M15.54 / ST15.09	0 (ST15.09)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	56	57	58	1	1	2	B (67)	NONE	57	1	0	57	1	0	57	1	0	56	2	0	56	2	0	56	2	0	56	2	0	56	2	0	--	--	--
M15.55-2 / ST15.10	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	58	60	60	2	0	2	B (67)	NONE	59	1	0	58	2	0	58	2	0	58	2	0	58	2	0	57	3	0	57	3	0	57	3	0	--	--	--
M15.56-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	55	56	56	1	0	1	B (67)	NONE	56	0	0	56	0	0	56	0	0	56	0	0	56	0	0	56	0	0	56	0	0	56	0	0	--	--	--
M15.57-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	61	62	62	1	0	1	B (67)	NONE	59	3	0	58	4	0	57	5	1	56	6	1	56	6	1	56	6	1	56	6	1	56	6	1	--	--	--
M15.58-2	0 (ST15.03)	15	SW1800C - ROW	Residential / B	2	2804 Fashion Dr, Corona, CA 92883	56	57	58	1	1	2	B (67)	NONE	57	1	0	56	2	0	56	2	0	55	3	0	55	3	0	54	4	0	54	4	0	54	4	0	--	--	--
M15.59-2	0 (ST15.10)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	53	54	54	1	0	1	B (67)	NONE	54	0	0	54	0	0	54	0	0	53	1	0	53	1	0	53	1	0	53	1	0	53	1	0	--	--	--
M15.60	0 (ST15.02)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	52	53	53	1	0	1	B (67)	NONE	53	0	0	53	0	0	53	0	0	53	0	0	53	0	0	53	0	0	53	0	0	53	0	0	--	--	--
M15.61-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	53	54	56	1	2	3	B (67)	NONE	55	1	0	55	1	0	55	1	0	55	1	0	55	1	0	55	1	0	55	1	0	55	1	0	--	--	--
M15.62	0 (ST15.02)	15		Residential / B	3	2804 Fashion Dr, Corona, CA 92883	56	57	58	1	1	2	B (67)	NONE	57	1	0	57	1	0	56	2	0	56	2	0	56	2	0	56	2	0	56	2	0	55	3	0	--	--	--
M15.63-2	0 (ST15.10)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	60	61	61	1	0	1	B (67)	NONE	60	1	0	60	1	0	60	1	0	60	1	0	60	1	0	60	1	0	60	1	0	60	1	0	--	--	--
M15.64	-4 (ST15.04)	15		Shopping Mall Playground / C	1	2780 Cabot Dr, Corona, CA 92883	56	57	58	1	1	2	C (67)	NONE	58	0	0	57	1	0	57	1	0	57	1	0	57	1	0	57	1	0	57	1	0	57	1	0	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - $L_{eq}(h)$, dBA																																													
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, $L_{eq}(h)$, dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																		
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR
M15.01	0 (ST15.01)	15	SW1890 A+B Combination Mainline & Ramp EOS	Residential / B	1	2804 Fashion Dr, Corona, CA 92883	61	62	62	1	0	1	B (67)	NONE	62	0	0	62	0	0	61	1	0	61	1	0	61	1	0	--	--	--	--	--	--	--	--	--	61	1	0
M15.02	0 (ST15.01)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	61	63	63	2	0	2	B (67)	NONE	62	1	0	62	1	0	62	1	0	62	1	0	62	1	0	--	--	--	--	--	--	--	--	--	62	1	0
M15.03	0 (ST15.09)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	63	64	64	1	0	1	B (67)	NONE	63	1	0	63	1	0	63	1	0	63	1	0	63	1	0	--	--	--	--	--	--	--	--	--	63	1	0
M15.04-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	62	64	64	2	0	2	B (67)	NONE	64	0	0	64	0	0	64	0	0	64	0	0	64	0	0	--	--	--	--	--	--	--	--	--	64	0	0
M15.05-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	57	58	58	1	0	1	B (67)	NONE	57	1	0	57	1	0	56	2	0	55	3	0	55	3	0	--	--	--	--	--	--	--	--	--	55	3	0
M15.06-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	57	58	58	1	0	1	B (67)	NONE	57	1	0	56	2	0	55	3	0	55	3	0	55	3	0	--	--	--	--	--	--	--	--	--	55	3	0
M15.07-2	0 (ST15.10)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	56	57	57	1	0	1	B (67)	NONE	55	2	0	55	2	0	54	3	0	53	4	0	53	4	0	--	--	--	--	--	--	--	--	--	53	4	0
M15.08-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	65	66	66	1	0	1	B (67)	A/E	65	1	0	64	2	0	63	3	0	63	3	0	63	3	0	--	--	--	--	--	--	--	--	--	63	3	0
M15.09-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	60	61	61	1	0	1	B (67)	NONE	59	2	0	59	2	0	59	2	0	58	3	0	58	3	0	--	--	--	--	--	--	--	--	--	58	3	0
M15.09-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	65	66	65	1	-1	0	B (67)	NONE	63	2	0	63	2	0	62	3	0	62	3	0	61	4	0	--	--	--	--	--	--	--	--	--	62	3	0
M15.09-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	67	68	68	1	0	1	B (67)	A/E	65	3	0	65	3	0	64	4	0	64	4	0	63	5	2	--	--	--	--	--	--	--	--	--	63	5	2
M15.10-2	0 (ST15.03)	15		Residential / B	6	2804 Fashion Dr, Corona, CA 92883	60	61	61	1	0	1	B (67)	NONE	59	2	0	58	3	0	57	4	0	56	5	6	56	5	6	--	--	--	--	--	--	--	--	--	56	5	6
M15.11-2 / ST15.03	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	61	62	61	1	-1	0	B (67)	NONE	60	1	0	59	2	0	58	3	0	57	4	0	56	5	1	--	--	--	--	--	--	--	--	--	56	5	1
M15.12-2	0 (ST15.10)	15	SW1890 A+B Combination Mainline & Ramp EOS	Residential / B	2	2804 Fashion Dr, Corona, CA 92883	61	62	62	1	0	1	B (67)	NONE	60	2	0	60	2	0	59	3	0	58	4	0	57	5	2	--	--	--	--	--	--	--	--	--	57	5	2
M15.12-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	64	65	65	1	0	1	B (67)	NONE	63	2	0	62	3	0	62	3	0	61	4	0	61	4	0	--	--	--	--	--	--	--	--	--	61	4	0
M15.12-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	67	68	68	1	0	1	B (67)	A/E	64	4	0	64	4	0	63	5	2	63	5	2	62	6	2	--	--	--	--	--	--	--	--	--	62	6	2
M15.13-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	55	56	56	1	0	1	B (67)	NONE	54	2	0	54	2	0	53	3	0	52	4	0	51	5	2	--	--	--	--	--	--	--	--	--	51	5	2
M15.13-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	58	59	58	1	-1	0	B (67)	NONE	56	2	0	55	3	0	54	4	0	53	5	2	52	6	2	--	--	--	--	--	--	--	--	--	52	6	2
M15.13-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	60	61	60	1	-1	0	B (67)	NONE	58	2	0	57	3	0	56	4	0	56	4	0	55	5	2	--	--	--	--	--	--	--	--	--	55	5	2
M15.14 / ST15.01	0 (ST15.01)	15		Residential / B	5	2804 Fashion Dr, Corona, CA 92883	58	59	59	1	0	1	B (67)	NONE	59	0	0	58	1	0	57	2	0	56	3	0	56	3	0	--	--	--	--	--	--	--	--	--	56	3	0
M15.15	0 (ST15.09)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	57	58	58	1	0	1	B (67)	NONE	57	1	0	56	2	0	56	2	0	55	3	0	54	4	0	--	--	--	--	--	--	--	--	--	54	4	0
M15.16-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	62	63	63	1	0	1	B (67)	NONE	61	2	0	60	3	0	59	4	0	58	5	2	58	5	2	--	--	--	--	--	--	--	--	--	58	5	2

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - $L_{eq}(h)$, dBA																																												
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, $L_{eq}(h)$, dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR
M15.16-3	0 (ST15.11)	15	SW1890 A+B Combination Mainline & Ramp EOS	Residential / B	2	2804 Fashion Dr, Corona, CA 92883	64	65	65	1	0	1	B (67)	NONE	62	3	0	62	3	0	61	4	0	60	5	2	60	5	2	--	--	--	--	--	--	--	--	--	60	5	2
M15.16-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	66	67	67	1	0	1	B (67)	A/E	64	3	0	63	4	0	62	5	2	62	5	2	61	6	2	--	--	--	--	--	--	--	--	--	61	6	2
M15.17-2	0 (ST15.03)	15		Residential / B	3	2804 Fashion Dr, Corona, CA 92883	58	59	59	1	0	1	B (67)	NONE	57	2	0	57	2	0	56	3	0	55	4	0	54	5	3	--	--	--	--	--	--	--	--	--	54	5	3
M15.18	0 (ST15.01)	15		Residential / B	7	2804 Fashion Dr, Corona, CA 92883	54	55	55	1	0	1	B (67)	NONE	54	1	0	54	1	0	53	2	0	52	3	0	52	3	0	--	--	--	--	--	--	--	--	--	52	3	0
M15.19	0 (ST15.09)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	58	59	59	1	0	1	B (67)	NONE	57	2	0	57	2	0	56	3	0	55	4	0	55	4	0	--	--	--	--	--	--	--	--	--	55	4	0
M15.20-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	62	63	63	1	0	1	B (67)	NONE	61	2	0	60	3	0	59	4	0	58	5	2	58	5	2	--	--	--	--	--	--	--	--	--	58	5	2
M15.20-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	64	65	65	1	0	1	B (67)	NONE	62	3	0	61	4	0	61	4	0	60	5	2	59	6	2	--	--	--	--	--	--	--	--	--	60	5	2
M15.20-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	66	67	66	1	-1	0	B (67)	A/E	64	2	0	63	3	0	62	4	0	61	5	2	61	5	2	--	--	--	--	--	--	--	--	--	61	5	2
M15.21-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	46	47	47	1	0	1	B (67)	NONE	46	1	0	46	1	0	46	1	0	45	2	0	45	2	0	--	--	--	--	--	--	--	--	--	45	2	0
M15.21-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	50	52	52	2	0	2	B (67)	NONE	51	1	0	51	1	0	51	1	0	50	2	0	50	2	0	--	--	--	--	--	--	--	--	--	50	2	0
M15.21-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	56	57	58	1	1	2	B (67)	NONE	58	0	0	58	0	0	57	1	0	57	1	0	57	1	0	--	--	--	--	--	--	--	--	--	57	1	0
M15.22-2	0 (ST15.10)	15	-	Residential / B	1	2804 Fashion Dr, Corona, CA 92883	55	56	57	1	1	2	B (67)	NONE	55	2	0	55	2	0	54	3	0	54	3	0	53	4	0	--	--	--	--	--	--	--	--	--	54	3	0
M15.23-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	58	59	59	1	0	1	B (67)	NONE	58	1	0	57	2	0	56	3	0	55	4	0	54	5	1	--	--	--	--	--	--	--	--	--	54	5	1
M15.24-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	56	58	58	2	0	2	B (67)	NONE	57	1	0	56	2	0	55	3	0	54	4	0	53	5	1	--	--	--	--	--	--	--	--	--	53	5	1
M15.25-2	0 (ST15.03)	15		Residential / B	4	2804 Fashion Dr, Corona, CA 92883	53	55	55	2	0	2	B (67)	NONE	54	1	0	53	2	0	53	2	0	52	3	0	51	4	0	--	--	--	--	--	--	--	--	--	51	4	0
M15.26	0 (ST15.01)	15	SW1890 A+B Combination Mainline & Ramp EOS	Apartment complex lawn / B	3	2804 Fashion Dr, Corona, CA 92883	61	62	61	1	-1	0	B (67)	NONE	59	2	0	57	4	0	56	5	3	55	6	3	54	7	3	--	--	--	--	--	--	--	--	--	54	7	3
M15.27	0 (ST15.01)	15		Apartment complex basketball court / B	3	2804 Fashion Dr, Corona, CA 92883	60	61	60	1	-1	0	B (67)	NONE	59	1	0	56	4	0	55	5	3	53	7	3	53	7	3	--	--	--	--	--	--	--	--	--	53	7	3
M15.28	0 (ST15.01)	15		Apartment complex pool / B	5	2804 Fashion Dr, Corona, CA 92883	56	57	57	1	0	1	B (67)	NONE	56	1	0	56	1	0	54	3	0	53	4	0	53	4	0	--	--	--	--	--	--	--	--	--	53	4	0
M15.29-2	0 (ST15.10)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	54	55	56	1	1	2	B (67)	NONE	55	1	0	55	1	0	54	2	0	54	2	0	54	2	0	--	--	--	--	--	--	--	--	--	54	2	0
M15.30-2	0 (ST15.03)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	54	55	56	1	1	2	B (67)	NONE	56	0	0	55	1	0	54	2	0	53	3	0	53	3	0	--	--	--	--	--	--	--	--	--	53	3	0
M15.31-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	58	59	60	1	1	2	B (67)	NONE	59	1	0	58	2	0	57	3	0	57	3	0	56	4	0	--	--	--	--	--	--	--	--	--	57	3	0
M15.32-2	0 (ST15.03)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	60	61	59	1	-2	-1	B (67)	NONE	58	1	0	56	3	0	55	4	0	54	5	2	53	6	2	--	--	--	--	--	--	--	--	--	53	6	2

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA																																													
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																		
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M15.33-2	0 (ST15.10)	15	SW1890 A+B Combination Mainline & Ramp EOS	Residential / B	2	2804 Fashion Dr, Corona, CA 92883	46	47	47	1	0	1	B (67)	NONE	46	1	0	46	1	0	46	1	0	45	2	0	44	3	0	--	--	--	--	--	--	--	--	--	45	2	0
M15.33-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	51	52	52	1	0	1	B (67)	NONE	50	2	0	50	2	0	49	3	0	48	4	0	48	4	0	--	--	--	--	--	--	--	--	--	48	4	0
M15.33-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	58	59	60	1	1	2	B (67)	NONE	57	3	0	56	4	0	56	4	0	55	5	2	55	5	2	--	--	--	--	--	--	--	--	--	55	5	2
M15.34-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	61	63	62	2	-1	1	B (67)	NONE	60	2	0	59	3	0	58	4	0	57	5	2	57	5	2	--	--	--	--	--	--	--	--	--	57	5	2
M15.34-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	64	65	64	1	-1	0	B (67)	NONE	62	2	0	61	3	0	61	3	0	60	4	0	60	4	0	--	--	--	--	--	--	--	--	--	60	4	0
M15.34-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	66	67	66	1	-1	0	B (67)	A/E	64	2	0	63	3	0	62	4	0	62	4	0	61	5	2	--	--	--	--	--	--	--	--	--	61	5	2
M15.35	0 (ST15.02)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	55	56	55	1	-1	0	B (67)	NONE	55	0	0	54	1	0	52	3	0	51	4	0	51	4	0	--	--	--	--	--	--	--	--	--	51	4	0
M15.36-2	0 (ST15.03)	15		Residential / B	4	2804 Fashion Dr, Corona, CA 92883	62	63	62	1	-1	0	B (67)	NONE	60	2	0	59	3	0	58	4	0	56	6	4	56	6	4	--	--	--	--	--	--	--	--	--	56	6	4
M15.37	0 (ST15.02)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	57	58	57	1	-1	0	B (67)	NONE	54	3	0	53	4	0	52	5	2	51	6	2	50	7	2	--	--	--	--	--	--	--	--	--	50	7	2
M15.38	0 (ST15.02)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	56	57	57	1	0	1	B (67)	NONE	56	1	0	56	1	0	54	3	0	53	4	0	53	4	0	--	--	--	--	--	--	--	--	--	53	4	0
M15.39-2	0 (ST15.10)	15	-	Residential / B	2	2804 Fashion Dr, Corona, CA 92883	60	62	61	2	-1	1	B (67)	NONE	60	1	0	59	2	0	59	2	0	58	3	0	58	3	0	--	--	--	--	--	--	--	--	--	58	3	0
M15.39-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	63	65	64	2	-1	1	B (67)	NONE	62	2	0	61	3	0	61	3	0	60	4	0	60	4	0	--	--	--	--	--	--	--	--	--	60	4	0
M15.39-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	65	67	66	2	-1	1	B (67)	A/E	64	2	0	63	3	0	63	3	0	62	4	0	62	4	0	--	--	--	--	--	--	--	--	--	62	4	0
M15.40	0 (ST15.09)	15	SW1890 A+B Combination Mainline & Ramp EOS	Residential / B	1	2804 Fashion Dr, Corona, CA 92883	57	58	58	1	0	1	B (67)	NONE	57	1	0	57	1	0	56	2	0	56	2	0	55	3	0	--	--	--	--	--	--	--	--	--	55	3	0
M15.41-2	0 (ST15.03)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	54	54	55	0	1	1	B (67)	NONE	55	0	0	54	1	0	54	1	0	54	1	0	53	2	0	--	--	--	--	--	--	--	--	--	53	2	0
M15.42-2	0 (ST15.03)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	58	59	58	1	-1	0	B (67)	NONE	56	2	0	55	3	0	55	3	0	54	4	0	53	5	2	--	--	--	--	--	--	--	--	--	53	5	2
M15.43-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	45	47	47	2	0	2	B (67)	NONE	46	1	0	46	1	0	45	2	0	45	2	0	44	3	0	--	--	--	--	--	--	--	--	--	44	3	0
M15.43-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	48	49	50	1	1	2	B (67)	NONE	49	1	0	48	2	0	48	2	0	47	3	0	47	3	0	--	--	--	--	--	--	--	--	--	47	3	0
M15.43-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	53	54	55	1	1	2	B (67)	NONE	54	1	0	53	2	0	53	2	0	52	3	0	51	4	0	--	--	--	--	--	--	--	--	--	52	3	0
M15.44-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	60	61	61	1	0	1	B (67)	NONE	60	1	0	59	2	0	59	2	0	58	3	0	58	3	0	--	--	--	--	--	--	--	--	--	58	3	0
M15.44-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	63	64	64	1	0	1	B (67)	NONE	62	2	0	62	2	0	61	3	0	60	4	0	60	4	0	--	--	--	--	--	--	--	--	--	60	4	0

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - $L_{eq}(h)$, dBA																																													
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, $L_{eq}(h)$, dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																		
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR
M15.44-4	0 (ST15.12)	15	SW1890 A+B Combination Mainline & Ramp EOS	Residential / B	2	2804 Fashion Dr, Corona, CA 92883	65	67	66	2	-1	1	B (67)	A/E	64	2	0	63	3	0	63	3	0	62	4	0	62	4	0	--	--	--	--	--	--	--	--	--	62	4	0
M15.45-2	0 (ST15.03)	15		Residential / B	4	2804 Fashion Dr, Corona, CA 92883	61	62	62	1	0	1	B (67)	NONE	60	2	0	59	3	0	58	4	0	57	5	4	57	5	4	--	--	--	--	--	--	--	--	--	57	5	4
M15.46 / ST15.02	0 (ST15.02)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	55	56	55	1	-1	0	B (67)	NONE	54	1	0	53	2	0	52	3	0	51	4	0	50	5	2	--	--	--	--	--	--	--	--	--	50	5	2
M15.47	0 (ST15.02)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	53	54	55	1	1	2	B (67)	NONE	55	0	0	54	1	0	53	2	0	52	3	0	53	2	0	--	--	--	--	--	--	--	--	--	53	2	0
M15.48	0 (ST15.02)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	57	58	58	1	0	1	B (67)	NONE	57	1	0	56	2	0	55	3	0	54	4	0	54	4	0	--	--	--	--	--	--	--	--	--	54	4	0
M15.49-3 / ST15.11	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	63	64	64	1	0	1	B (67)	NONE	62	2	0	61	3	0	61	3	0	61	3	0	60	4	0	--	--	--	--	--	--	--	--	--	60	4	0
M15.50-4 / ST15.12	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	65	67	66	2	-1	1	B (67)	A/E	64	2	0	64	2	0	63	3	0	63	3	0	62	4	0	--	--	--	--	--	--	--	--	--	63	3	0
M15.51-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	54	55	55	1	0	1	B (67)	NONE	55	0	0	54	1	0	54	1	0	54	1	0	53	2	0	--	--	--	--	--	--	--	--	--	53	2	0
M15.52-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	54	55	56	1	1	2	B (67)	NONE	56	0	0	56	0	0	55	1	0	55	1	0	55	1	0	--	--	--	--	--	--	--	--	--	55	1	0
M15.53-2	0 (ST15.03)	15		Residential / B	3	2804 Fashion Dr, Corona, CA 92883	51	52	53	1	1	2	B (67)	NONE	53	0	0	52	1	0	52	1	0	51	2	0	51	2	0	--	--	--	--	--	--	--	--	--	51	2	0
M15.54 / ST15.09	0 (ST15.09)	15	-	Residential / B	1	2804 Fashion Dr, Corona, CA 92883	56	57	58	1	1	2	B (67)	NONE	57	1	0	57	1	0	57	1	0	56	2	0	56	2	0	--	--	--	--	--	--	--	--	--	56	2	0
M15.55-2 / ST15.10	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	58	60	60	2	0	2	B (67)	NONE	59	1	0	58	2	0	58	2	0	57	3	0	57	3	0	--	--	--	--	--	--	--	--	--	57	3	0
M15.56-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	55	56	56	1	0	1	B (67)	NONE	55	1	0	54	2	0	53	3	0	52	4	0	52	4	0	--	--	--	--	--	--	--	--	--	52	4	0
M15.57-2	0 (ST15.03)	15	SW1890 A+B Combination Mainline & Ramp EOS	Residential / B	1	2804 Fashion Dr, Corona, CA 92883	61	62	62	1	0	1	B (67)	NONE	60	2	0	59	3	0	58	4	0	57	5	1	56	6	1	--	--	--	--	--	--	--	--	--	56	6	1
M15.58-2	0 (ST15.03)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	56	57	58	1	1	2	B (67)	NONE	57	1	0	56	2	0	55	3	0	56	2	0	56	2	0	--	--	--	--	--	--	--	--	--	56	2	0
M15.59-2	0 (ST15.10)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	53	54	54	1	0	1	B (67)	NONE	53	1	0	53	1	0	52	2	0	52	2	0	51	3	0	--	--	--	--	--	--	--	--	--	51	3	0
M15.60	0 (ST15.02)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	52	53	53	1	0	1	B (67)	NONE	52	1	0	52	1	0	51	2	0	51	2	0	51	2	0	--	--	--	--	--	--	--	--	--	51	2	0
M15.61-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	53	54	56	1	2	3	B (67)	NONE	55	1	0	55	1	0	55	1	0	55	1	0	55	1	0	--	--	--	--	--	--	--	--	--	55	1	0
M15.62	0 (ST15.02)	15		Residential / B	3	2804 Fashion Dr, Corona, CA 92883	56	57	58	1	1	2	B (67)	NONE	57	1	0	57	1	0	57	1	0	57	1	0	57	1	0	--	--	--	--	--	--	--	--	--	57	1	0
M15.63-2	0 (ST15.10)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	60	61	61	1	0	1	B (67)	NONE	61	0	0	61	0	0	61	0	0	60	1	0	60	1	0	--	--	--	--	--	--	--	--	--	60	1	0
M15.64	-4 (ST15.04)	15		Shopping Mall Playground / C	1	2780 Cabot Dr, Corona, CA 92883	56	57	58	1	1	2	C (67)	NONE	58	0	0	58	0	0	58	0	0	58	0	0	57	1	0	--	--	--	--	--	--	--	--	--	57	1	0

Table B-1. Predicted Future Noise Levels and Noise Barrier Analysis

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - $L_{eq}(h)$, dBA

Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, $L_{eq}(h)$, dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																										
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR
M15.01	0 (ST15.01)	15	SW1890 A+C Combination Mainline EOS & ROW	Residential / B	1	2804 Fashion Dr, Corona, CA 92883	61	62	62	1	0	1	B (67)	NONE	62	0	0	62	0	0	61	1	0	61	1	0	61	1	0	61	1	0	61	1	0	61	1	0	61	1	0
M15.02	0 (ST15.01)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	61	63	63	2	0	2	B (67)	NONE	62	1	0	62	1	0	62	1	0	62	1	0	62	1	0	62	1	0	62	1	0	62	1	0	62	1	0
M15.03	0 (ST15.09)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	63	64	64	1	0	1	B (67)	NONE	63	1	0	63	1	0	63	1	0	63	1	0	63	1	0	63	1	0	63	1	0	63	1	0	63	1	0
M15.04-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	62	64	64	2	0	2	B (67)	NONE	64	0	0	64	0	0	64	0	0	64	0	0	64	0	0	64	0	0	64	0	0	64	0	0	64	0	0
M15.05-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	57	58	58	1	0	1	B (67)	NONE	57	1	0	56	2	0	55	3	0	54	4	0	54	4	0	53	5	1	53	5	1	53	5	1	53	5	1
M15.06-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	57	58	58	1	0	1	B (67)	NONE	57	1	0	56	2	0	55	3	0	55	3	0	54	4	0	54	4	0	54	4	0	54	4	0	54	4	0
M15.07-2	0 (ST15.10)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	56	57	57	1	0	1	B (67)	NONE	55	2	0	55	2	0	54	3	0	53	4	0	53	4	0	53	4	0	53	4	0	53	4	0	53	4	0
M15.08-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	65	66	66	1	0	1	B (67)	A/E	64	2	0	63	3	0	62	4	0	61	5	1	61	5	1	61	5	1	61	5	1	61	5	1	61	5	1
M15.09-2	0 (ST15.10)	15	-	Residential / B	2	2804 Fashion Dr, Corona, CA 92883	60	61	61	1	0	1	B (67)	NONE	59	2	0	59	2	0	58	3	0	58	3	0	57	4	0	56	5	2	56	5	2	56	5	2	56	5	2
M15.09-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	65	66	65	1	-1	0	B (67)	NONE	63	2	0	63	2	0	62	3	0	61	4	0	61	4	0	61	4	0	61	4	0	60	5	2	61	4	0
M15.09-4	0 (ST15.12)	15	SW1890 A+C Combination Mainline EOS & ROW	Residential / B	2	2804 Fashion Dr, Corona, CA 92883	67	68	68	1	0	1	B (67)	A/E	65	3	0	64	4	0	64	4	0	63	5	2	63	5	2	63	5	2	63	5	2	63	5	2	63	5	2
M15.10-2	0 (ST15.03)	15		Residential / B	6	2804 Fashion Dr, Corona, CA 92883	60	61	61	1	0	1	B (67)	NONE	58	3	0	58	3	0	57	4	0	55	6	6	53	8	6	52	9	6	52	9	6	51	10	6	52	9	6
M15.11-2 / ST15.03	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	61	62	61	1	-1	0	B (67)	NONE	59	2	0	59	2	0	57	4	0	56	5	1	55	6	1	54	7	1	54	7	1	54	7	1	54	7	1
M15.12-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	61	62	62	1	0	1	B (67)	NONE	60	2	0	59	3	0	58	4	0	57	5	2	57	5	2	57	5	2	56	6	2	56	6	2	57	5	2
M15.12-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	64	65	65	1	0	1	B (67)	NONE	63	2	0	62	3	0	61	4	0	61	4	0	60	5	2	60	5	2	60	5	2	60	5	2	60	5	2
M15.12-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	67	68	68	1	0	1	B (67)	A/E	64	4	0	63	5	2	63	5	2	62	6	2	62	6	2	62	6	2	62	6	2	62	6	2	62	6	2
M15.13-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	55	56	56	1	0	1	B (67)	NONE	54	2	0	53	3	0	52	4	0	51	5	2	50	6	2	50	6	2	50	6	2	50	6	2	50	6	2
M15.13-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	58	59	58	1	-1	0	B (67)	NONE	55	3	0	54	4	0	53	5	2	52	6	2	51	7	2	51	7	2	51	7	2	51	7	2	51	7	2

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA																																									
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																										
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M15.13-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	60	61	60	1	-1	0	B (67)	NONE	58	2	0	56	4	0	56	4	0	55	5	2	54	6	2	54	6	2	54	6	2	54	6	2	54	6	2
M15.14 / ST15.01	0 (ST15.01)	15		Residential / B	5	2804 Fashion Dr, Corona, CA 92883	58	59	59	1	0	1	B (67)	NONE	58	1	0	57	2	0	56	3	0	55	4	0	55	4	0	55	4	0	55	4	0	54	5	5	55	4	0
M15.15	0 (ST15.09)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	57	58	58	1	0	1	B (67)	NONE	57	1	0	56	2	0	55	3	0	55	3	0	54	4	0	54	4	0	53	5	1	53	5	1	54	4	0
M15.16-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	62	63	63	1	0	1	B (67)	NONE	60	3	0	60	3	0	59	4	0	58	5	2	58	5	2	58	5	2	58	5	2	57	6	2	58	5	2
M15.16-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	64	65	65	1	0	1	B (67)	NONE	62	3	0	61	4	0	61	4	0	60	5	2	60	5	2	59	6	2	59	6	2	59	6	2	59	6	2
M15.16-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	66	67	67	1	0	1	B (67)	A/E	64	3	0	63	4	0	62	5	2	61	6	2	61	6	2	61	6	2	61	6	2	61	6	2	61	6	2
M15.17-2	0 (ST15.03)	15	SW1890 A+C Combination Mainline EOS & ROW	Residential / B	3	2804 Fashion Dr, Corona, CA 92883	58	59	59	1	0	1	B (67)	NONE	57	2	0	57	2	0	54	5	3	53	6	3	52	7	3	52	7	3	52	7	3	51	8	3	52	7	3
M15.18	0 (ST15.01)	15		Residential / B	7	2804 Fashion Dr, Corona, CA 92883	54	55	55	1	0	1	B (67)	NONE	54	1	0	54	1	0	53	2	0	52	3	0	51	4	0	51	4	0	51	4	0	51	4	0	51	4	0
M15.19	0 (ST15.09)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	58	59	59	1	0	1	B (67)	NONE	57	2	0	56	3	0	56	3	0	55	4	0	55	4	0	55	4	0	54	5	1	53	6	1	55	4	0
M15.20-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	62	63	63	1	0	1	B (67)	NONE	61	2	0	60	3	0	59	4	0	58	5	2	57	6	2	57	6	2	57	6	2	57	6	2	57	6	2
M15.20-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	64	65	65	1	0	1	B (67)	NONE	62	3	0	61	4	0	60	5	2	60	5	2	59	6	2	59	6	2	59	6	2	59	6	2	59	6	2
M15.20-4	0 (ST15.12)	15	-	Residential / B	2	2804 Fashion Dr, Corona, CA 92883	66	67	66	1	-1	0	B (67)	A/E	63	3	0	62	4	0	62	4	0	61	5	2	60	6	2	60	6	2	60	6	2	60	6	2	60	6	2
M15.21-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	46	47	47	1	0	1	B (67)	NONE	46	1	0	46	1	0	46	1	0	45	2	0	45	2	0	45	2	0	45	2	0	45	2	0	45	2	0
M15.21-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	50	52	52	2	0	2	B (67)	NONE	51	1	0	51	1	0	50	2	0	50	2	0	50	2	0	49	3	0	49	3	0	49	3	0	50	2	0
M15.21-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	56	57	58	1	1	2	B (67)	NONE	57	1	0	57	1	0	57	1	0	57	1	0	57	1	0	57	1	0	56	2	0	56	2	0	57	1	0
M15.22-2	0 (ST15.10)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	55	56	57	1	1	2	B (67)	NONE	55	2	0	55	2	0	54	3	0	54	3	0	53	4	0	52	5	1	52	5	1	52	5	1	52	5	1
M15.23-2	0 (ST15.03)	15	SW1890 A+C Combination Mainline EOS & ROW	Residential / B	1	2804 Fashion Dr, Corona, CA 92883	58	59	59	1	0	1	B (67)	NONE	57	2	0	56	3	0	55	4	0	54	5	1	53	6	1	53	6	1	52	7	1	52	7	1	53	6	1
M15.24-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	56	58	58	2	0	2	B (67)	NONE	55	3	0	54	4	0	53	5	1	52	6	1	52	6	1	51	7	1	51	7	1	51	7	1	51	7	1
M15.25-2	0 (ST15.03)	15		Residential / B	4	2804 Fashion Dr, Corona, CA 92883	53	55	55	2	0	2	B (67)	NONE	53	2	0	53	2	0	52	3	0	51	4	0	51	4	0	51	4	0	50	5	4	50	5	4	51	4	0
M15.26	0 (ST15.01)	15		Apartment complex lawn / B	3	2804 Fashion Dr, Corona, CA 92883	61	62	61	1	-1	0	B (67)	NONE	58	3	0	57	4	0	56	5	3	55	6	3	54	7	3	54	7	3	54	7	3	54	7	3	54	7	3
M15.27	0 (ST15.01)	15		Apartment complex basketball court / B	3	2804 Fashion Dr, Corona, CA 92883	60	61	60	1	-1	0	B (67)	NONE	58	2	0	55	5	3	54	6	3	53	7	3	52	8	3	52	8	3	52	8	3	52	8	3	52	8	3
M15.28	0 (ST15.01)	15		Apartment complex pool / B	5	2804 Fashion Dr, Corona, CA 92883	56	57	57	1	0	1	B (67)	NONE	56	1	0	56	1	0	54	3	0	53	4	0	52	5	5	52	5	5	52	5	5	52	5	5	52	5	5

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - $L_{eq}(h)$, dBA																																												
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, $L_{eq}(h)$, dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																	
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR
M15.29-2	0 (ST15.10)	15	SW1890 A+C Combination Mainline EOS & ROW	Residential / B	1	2804 Fashion Dr, Corona, CA 92883	54	55	56	1	1	2	B (67)	NONE	55	1	0	54	2	0	54	2	0	53	3	0	53	3	0	53	3	0	53	3	0	53	3	0	53	3	0
M15.30-2	0 (ST15.03)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	54	55	56	1	1	2	B (67)	NONE	55	1	0	54	2	0	54	2	0	53	3	0	53	3	0	53	3	0	52	4	0	52	4	0	53	3	0
M15.31-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	58	59	60	1	1	2	B (67)	NONE	57	3	0	57	3	0	56	4	0	56	4	0	56	4	0	55	5	1	55	5	1	55	5	1	55	5	1
M15.32-2	0 (ST15.03)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	60	61	59	1	-2	-1	B (67)	NONE	57	2	0	55	4	0	54	5	2	53	6	2	52	7	2	52	7	2	52	7	2	52	7	2	52	7	2
M15.33-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	46	47	47	1	0	1	B (67)	NONE	46	1	0	46	1	0	45	2	0	45	2	0	44	3	0	44	3	0	44	3	0	44	3	0	44	3	0
M15.33-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	51	52	52	1	0	1	B (67)	NONE	50	2	0	49	3	0	49	3	0	48	4	0	47	5	2	47	5	2	47	5	2	47	5	2	47	5	2
M15.33-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	58	59	60	1	1	2	B (67)	NONE	57	3	0	56	4	0	56	4	0	55	5	2	55	5	2	55	5	2	55	5	2	54	6	2	55	5	2
M15.34-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	61	63	62	2	-1	1	B (67)	NONE	60	2	0	59	3	0	58	4	0	57	5	2	56	6	2	56	6	2	56	6	2	56	6	2	56	6	2
M15.34-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	64	65	64	1	-1	0	B (67)	NONE	62	2	0	61	3	0	60	4	0	60	4	0	59	5	2	59	5	2	59	5	2	59	5	2	59	5	2
M15.34-4	0 (ST15.12)	15	-	Residential / B	2	2804 Fashion Dr, Corona, CA 92883	66	67	66	1	-1	0	B (67)	A/E	63	3	0	62	4	0	62	4	0	61	5	2	60	6	2	60	6	2	60	6	2	60	6	2	60	6	2
M15.35	0 (ST15.02)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	55	56	55	1	-1	0	B (67)	NONE	54	1	0	52	3	0	52	3	0	51	4	0	51	4	0	51	4	0	51	4	0	51	4	0	51	4	0
M15.36-2	0 (ST15.03)	15		Residential / B	4	2804 Fashion Dr, Corona, CA 92883	62	63	62	1	-1	0	B (67)	NONE	59	3	0	59	3	0	57	5	4	56	6	4	55	7	4	55	7	4	55	7	4	55	7	4	55	7	4
M15.37	0 (ST15.02)	15	SW1890 A+C Combination Mainline EOS & ROW	Residential / B	2	2804 Fashion Dr, Corona, CA 92883	57	58	57	1	-1	0	B (67)	NONE	54	3	0	52	5	2	52	5	2	51	6	2	50	7	2	50	7	2	50	7	2	50	7	2	50	7	2
M15.38	0 (ST15.02)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	56	57	57	1	0	1	B (67)	NONE	56	1	0	56	1	0	54	3	0	53	4	0	52	5	2	52	5	2	52	5	2	52	5	2	52	5	2
M15.39-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	60	62	61	2	-1	1	B (67)	NONE	59	2	0	59	2	0	58	3	0	57	4	0	57	4	0	57	4	0	57	4	0	57	4	0	57	4	0
M15.39-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	63	65	64	2	-1	1	B (67)	NONE	62	2	0	61	3	0	61	3	0	60	4	0	59	5	2	59	5	2	59	5	2	59	5	2	59	5	2
M15.39-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	65	67	66	2	-1	1	B (67)	A/E	63	3	0	62	4	0	62	4	0	61	5	2	61	5	2	61	5	2	60	6	2	60	6	2	61	5	2
M15.40	0 (ST15.09)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	57	58	58	1	0	1	B (67)	NONE	57	1	0	56	2	0	56	2	0	55	3	0	55	3	0	55	3	0	55	3	0	54	4	0	55	3	0
M15.41-2	0 (ST15.03)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	54	54	55	0	1	1	B (67)	NONE	55	0	0	54	1	0	54	1	0	53	2	0	53	2	0	53	2	0	53	2	0	53	2	0	53	2	0

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA

Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR): 6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M15.42-2	0 (ST15.03)	15	SW1890 A+C Combination Mainline EOS & ROW	Residential / B	2	2804 Fashion Dr, Corona, CA 92883	58	59	58	1	-1	0	B (67)	NONE	56	2	0	55	3	0	54	4	0	53	5	2	52	6	2	52	6	2	52	6	2	52	6	2	52	6	2
M15.43-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	45	47	47	2	0	2	B (67)	NONE	46	1	0	46	1	0	45	2	0	44	3	0	44	3	0	44	3	0	44	3	0	44	3	0	44	3	0
M15.43-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	48	49	50	1	1	2	B (67)	NONE	48	2	0	48	2	0	47	3	0	47	3	0	46	4	0	46	4	0	46	4	0	46	4	0	46	4	0
M15.43-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	53	54	55	1	1	2	B (67)	NONE	53	2	0	53	2	0	52	3	0	52	3	0	51	4	0	51	4	0	51	4	0	51	4	0	51	4	0
M15.44-2	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	60	61	61	1	0	1	B (67)	NONE	59	2	0	59	2	0	58	3	0	58	3	0	57	4	0	57	4	0	57	4	0	57	4	0	57	4	0
M15.44-3	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	63	64	64	1	0	1	B (67)	NONE	62	2	0	61	3	0	61	3	0	60	4	0	60	4	0	60	4	0	60	4	0	59	5	2	60	4	0
M15.44-4	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	65	67	66	2	-1	1	B (67)	A/E	63	3	0	63	3	0	62	4	0	61	5	2	61	5	2	61	5	2	61	5	2	61	5	2	61	5	2
M15.45-2	0 (ST15.03)	15	-	Residential / B	4	2804 Fashion Dr, Corona, CA 92883	61	62	62	1	0	1	B (67)	NONE	59	3	0	58	4	0	57	5	4	56	6	4	55	7	4	55	7	4	55	7	4	55	7	4	55	7	4
M15.46 / ST15.02	0 (ST15.02)	15	SW1890 A+C Combination Mainline EOS & ROW	Residential / B	2	2804 Fashion Dr, Corona, CA 92883	55	56	55	1	-1	0	B (67)	NONE	54	1	0	55	0	0	55	0	0	54	1	0	54	1	0	53	2	0	53	2	0	53	2	0	54	1	0
M15.47	0 (ST15.02)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	53	54	55	1	1	2	B (67)	NONE	54	1	0	54	1	0	53	2	0	53	2	0	53	2	0	53	2	0	52	3	0	52	3	0	53	2	0
M15.48	0 (ST15.02)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	57	58	58	1	0	1	B (67)	NONE	56	2	0	55	3	0	54	4	0	53	5	2	53	5	2	53	5	2	53	5	2	53	5	2	53	5	2
M15.49-3 / ST15.11	0 (ST15.11)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	63	64	64	1	0	1	B (67)	NONE	61	3	0	61	3	0	60	4	0	60	4	0	60	4	0	60	4	0	60	4	0	59	5	2	60	4	0
M15.50-4 / ST15.12	0 (ST15.12)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	65	67	66	2	-1	1	B (67)	A/E	64	2	0	63	3	0	62	4	0	62	4	0	62	4	0	61	5	2	61	5	2	61	5	2	61	5	2
M15.51-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	54	55	55	1	0	1	B (67)	NONE	54	1	0	54	1	0	54	1	0	53	2	0	53	2	0	52	3	0	52	3	0	52	3	0	52	3	0
M15.52-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	54	55	56	1	1	2	B (67)	NONE	55	1	0	55	1	0	55	1	0	54	2	0	54	2	0	54	2	0	54	2	0	53	3	0	54	2	0

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA

Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																										
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M15.53-2	0 (ST15.03)	15	SW1890 A+C Combination Mainline EOS & ROW	Residential / B	3	2804 Fashion Dr, Corona, CA 92883	51	52	53	1	1	2	B (67)	NONE	52	1	0	52	1	0	51	2	0	51	2	0	50	3	0	50	3	0	50	3	0	50	3	0	50	3	0
M15.54 / ST15.09	0 (ST15.09)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	56	57	58	1	1	2	B (67)	NONE	57	1	0	56	2	0	56	2	0	56	2	0	56	2	0	55	3	0	55	3	0	55	3	0	56	2	0
M15.55-2 / ST15.10	0 (ST15.10)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	58	60	60	2	0	2	B (67)	NONE	58	2	0	58	2	0	57	3	0	57	3	0	57	3	0	57	3	0	57	3	0	57	3	0	57	3	0
M15.56-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	55	56	56	1	0	1	B (67)	NONE	56	0	0	56	0	0	56	0	0	56	0	0	55	1	0	55	1	0	55	1	0	55	1	0	55	1	0
M15.57-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	61	62	62	1	0	1	B (67)	NONE	59	3	0	58	4	0	56	6	1	55	7	1	54	8	1	54	8	1	54	8	1	54	8	1	54	8	1
M15.58-2	0 (ST15.03)	15		Residential / B	2	2804 Fashion Dr, Corona, CA 92883	56	57	58	1	1	2	B (67)	NONE	57	1	0	56	2	0	55	3	0	55	3	0	54	4	0	54	4	0	54	4	0	54	4	0	54	4	0
M15.59-2	0 (ST15.10)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	53	54	54	1	0	1	B (67)	NONE	53	1	0	53	1	0	52	2	0	51	3	0	51	3	0	51	3	0	51	3	0	51	3	0	51	3	0
M15.60	0 (ST15.02)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	52	53	53	1	0	1	B (67)	NONE	53	0	0	52	1	0	53	0	0	53	0	0	53	0	0	53	0	0	53	0	0	53	0	0	53	0	0
M15.61-2	0 (ST15.03)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	53	54	56	1	2	3	B (67)	NONE	55	1	0	55	1	0	55	1	0	55	1	0	55	1	0	55	1	0	55	1	0	55	1	0	55	1	0
M15.62	0 (ST15.02)	15		Residential / B	3	2804 Fashion Dr, Corona, CA 92883	56	57	58	1	1	2	B (67)	NONE	57	1	0	57	1	0	56	2	0	56	2	0	56	2	0	56	2	0	56	2	0	55	3	0	56	2	0
M15.63-2	0 (ST15.10)	15		Residential / B	1	2804 Fashion Dr, Corona, CA 92883	60	61	61	1	0	1	B (67)	NONE	60	1	0	60	1	0	60	1	0	60	1	0	60	1	0	59	2	0	59	2	0	59	2	0	60	1	0
M15.64	-4 (ST15.04)	15		Shopping Mall Playground / C	1	2780 Cabot Dr, Corona, CA 92883	56	57	58	1	1	2	C (67)	NONE	58	0	0	57	1	0	57	1	0	57	1	0	57	1	0	57	1	0	57	1	0	57	1	0	57	1	0
M15.65 / ST15.04	-4 (ST15.04)	15		Restaurant outdoor dining / E	1	2785 Cabot Dr #101, Corona, CA 92883	60	62	62	2	0	2	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M15.66	-4 (ST15.04)	15		Park / C	1	27555 Lakeshore Dr, Corona, CA 92883	56	57	56	1	-1	0	C (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M15.67	-4 (ST15.04)	15		Restaurant outdoor dining / E	1	2715 Lakeshore Dr, Corona, CA 92883	45	47	47	2	0	2	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M15.68-2	-4 (ST15.06)	15		Residential / B	2	2700 Blue Springs Dr, Corona, CA 92883	58	59	58	1	-1	0	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M15.68-3	-4 (ST15.06)	15		Residential / B	2	2700 Blue Springs Dr, Corona, CA 92883	59	60	59	1	-1	0	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M15.69 / ST15.05	0 (ST15.05)	15		Residential / B	2	2724 Blue Springs Dr, Corona, CA 92883	55	56	56	1	0	1	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M15.70-2	-4 (ST15.06)	15		Residential / B	2	2724 Blue Springs Dr, Corona, CA 92883	58	59	58	1	-1	0	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M15.70-3	-4 (ST15.06)	15		Residential / B	2	2724 Blue Springs Dr, Corona, CA 92883	59	59	58	0	-1	-1	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M15.71-2	-4 (ST15.06)	15		Residential / B	4	2724 Blue Springs Dr, Corona, CA 92883	52	53	52	1	-1	0	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA																																													
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																		
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M15.71-3	-4 (ST15.06)	15		Residential / B	4	2724 Blue Springs Dr, Corona, CA 92883	54	55	54	1	-1	0	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M15.72-3 / ST15.06	-4 (ST15.06)	15		Residential / B	1	2728 Blue Springs Dr, Corona, CA 92883	58	58	58	0	0	0	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M15.73	0 (ST15.07)	15		Hotel basketball court / E	1	2731 Blue Springs Dr, Corona, CA 92883	55	56	56	1	0	1	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M15.74 / ST15.07	0 (ST15.07)	15		Hotel pool / E	1	2731 Blue Springs Dr, Corona, CA 92883	54	55	55	1	0	1	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M15.75 / ST15.08	-4 (ST15.08)	15		Undeveloped / G	--	N/A	67	68	69	1	1	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M16.01	-5 (ST16.01)	16		Undeveloped / G	--	N/A	68	68	68	0	0	0	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M16.02 / ST16.01	-5 (ST16.01)	16		Place of worship / C	1	8540 Weirick Rd, Corona, CA 92883	58	59	59	1	0	1	C (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M16.03 / ST16.02	0 (ST16.02)	16	SW1911 - Mainline EOS	Residential / B	1	8530 Nob Hill Rd, Corona, CA 92883	65	66	67	1	1	2	B (67)	A/E	67	0	0	67	0	0	67	0	0	67	0	0	67	0	0	--	--	--	--	--	--	--	--	--	67	0	0
M16.04	0 (ST16.02)	16		Residential / B	--	8530 Nob Hill Rd, Corona, CA 92883	69	70	71	1	1	2	B (67)	N/A*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M16.05	0 (ST16.02)	16		Residential / B	1	8510 Nob Hill Rd, Corona, CA 92883	69	70	72	1	2	3	B (67)	A/E	72	0	0	72	0	0	72	0	0	72	0	0	72	0	0	--	--	--	--	--	--	--	--	--	72	0	0
M16.06	0 (ST16.02)	16		Residential / B	1	8390 Nob Hill Rd, Corona, CA 92883	62	63	64	1	1	2	B (67)	NONE	64	0	0	63	1	0	63	1	0	63	1	0	62	2	0	--	--	--	--	--	--	--	--	--	63	1	0
M16.07	0 (ST16.03)	16		Residential / B	1	8600 Glen Rd, Corona, CA 92883	65	66	66	1	0	1	B (67)	A/E	65	1	0	64	2	0	64	2	0	63	3	0	62	4	0	--	--	--	--	--	--	--	--	--	62	4	0
M16.08	0 (ST16.03)	16		Residential / B	1	8640 Glen Rd, Temescal Valley, CA 92883	56	58	58	2	0	2	B (67)	NONE	57	1	0	56	2	0	55	3	0	55	3	0	54	4	0	--	--	--	--	--	--	--	--	--	54	4	0
M16.09	0 (ST16.03)	16		Residential / B	1	8580 Glen Rd, Corona, CA 92883	68	69	69	1	0	1	B (67)	A/E	67	2	0	66	3	0	65	4	0	64	5	1	62	7	1	--	--	--	--	--	--	--	--	--	62	7	1
M16.10 / ST16.03	0 (ST16.03)	16		Residential / B	--	8580 Glen Rd, Corona, CA 92883	69	70	70	1	0	1	B (67)	N/A**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M16.11	0 (ST16.04)	16		Residential / B	1	8265 Gambier Ct, Corona, CA 92883	64	65	63	1	-2	-1	B (67)	NONE	63	0	0	63	0	0	63	0	0	62	1	0	62	1	0	--	--	--	--	--	--	--	--	--	62	1	0
M16.12 / ST16.04	0 (ST16.04)	16		Residential / B	1	8405 Glen Rd, Corona, CA 92883	68	68	69	0	1	1	B (67)	A/E	69	0	0	69	0	0	69	0	0	69	0	0	69	0	0	--	--	--	--	--	--	--	--	--	69	0	0
M16.13	0 (ST16.04)	16		Residential / B	1	8335 Glen Rd, Corona, CA 92883	59	60	62	1	2	3	B (67)	NONE	61	1	0	61	1	0	61	1	0	60	2	0	59	3	0	--	--	--	--	--	--	--	--	--	60	2	0

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA																																													
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																		
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M16.03 / ST16.02	0 (ST16.02)	16	SW1903 - ROW	Residential / B	1	8530 Nob Hill Rd, Corona, CA 92883	65	66	67	1	1	2	B (67)	A/E	67	0	0	67	0	0	67	0	0	67	0	0	67	0	0	67	0	0	67	0	0	67	0	0	67	0	0
M16.05	0 (ST16.02)	16		Residential / B	1	8510 Nob Hill Rd, Corona, CA 92883	69	70	72	1	2	3	B (67)	A/E	72	0	0	72	0	0	72	0	0	72	0	0	72	0	0	72	0	0	72	0	0	72	0	0	72	0	0
M16.06	0 (ST16.02)	16		Residential / B	1	8390 Nob Hill Rd, Corona, CA 92883	62	63	64	1	1	2	B (67)	NONE	64	0	0	64	0	0	64	0	0	64	0	0	64	0	0	64	0	0	63	1	0	63	1	0	63	1	0
M16.07	0 (ST16.03)	16		Residential / B	1	8600 Glen Rd, Corona, CA 92883	65	66	66	1	0	1	B (67)	A/E	66	0	0	66	0	0	65	1	0	65	1	0	64	2	0	64	2	0	63	3	0	62	4	0	64	2	0
M16.08	0 (ST16.03)	16		Residential / B	1	8640 Glen Rd, Temescal Valley, CA 92883	56	58	58	2	0	2	B (67)	NONE	58	0	0	58	0	0	58	0	0	58	0	0	57	1	0	56	2	0	55	3	0	55	3	0	55	3	0
M16.09	0 (ST16.03)	16		Residential / B	1	8580 Glen Rd, Corona, CA 92883	68	69	69	1	0	1	B (67)	A/E	68	1	0	68	1	0	67	2	0	67	2	0	66	3	0	65	4	0	63	6	1	62	7	1	64	5	1
M16.11	0 (ST16.04)	16		Residential / B	1	8265 Gambier Ct, Corona, CA 92883	64	65	63	1	-2	-1	B (67)	NONE	63	0	0	63	0	0	63	0	0	63	0	0	63	0	0	63	0	0	63	0	0	63	0	0	63	0	0
M16.12 / ST16.04	0 (ST16.04)	16		Residential / B	1	8405 Glen Rd, Corona, CA 92883	68	68	69	0	1	1	B (67)	A/E	69	0	0	69	0	0	69	0	0	69	0	0	69	0	0	69	0	0	69	0	0	69	0	0	69	0	0
M16.13	0 (ST16.04)	16		Residential / B	1	8335 Glen Rd, Corona, CA 92883	59	60	62	1	2	3	B (67)	NONE	61	1	0	61	1	0	61	1	0	59	3	0	58	4	0	57	5	1	56	6	1	55	7	1	55	7	1
M16.03 / ST16.02	0 (ST16.02)	16	SW1895 - Private Property	Residential / B	1	8530 Nob Hill Rd, Corona, CA 92883	65	66	67	1	1	2	B (67)	A/E	60	7	1	56	11	1	54	13	1	53	14	1	52	15	1	51	16	1	--	--	--	--	--	--	60	7	1
M16.05	0 (ST16.02)	16	SW1899 - Private Property	Residential / B	1	8510 Nob Hill Rd, Corona, CA 92883	69	70	72	1	2	3	B (67)	A/E	64	8	1	63	9	1	63	9	1	63	9	1	63	9	1	63	9	1	--	--	--	--	--	--	64	8	1
M16.07	0 (ST16.03)	16	SW1905 - Private Property	Residential / B	1	8600 Glen Rd, Corona, CA 92883	65	66	66	1	0	1	B (67)	A/E	63	3	0	59	7	1	57	9	1	55	11	1	53	13	1	52	14	1	--	--	--	--	--	--	59	7	1
M16.09	0 (ST16.03)	16	SW1907 - Private Property	Residential / B	1	8580 Glen Rd, Corona, CA 92883	68	69	69	1	0	1	B (67)	A/E	63	6	1	61	8	1	60	9	1	59	10	1	59	10	1	58	11	1	--	--	--	--	--	--	62	7	1
M16.12 / ST16.04	0 (ST16.04)	16	SW1913 - Private Property	Residential / B	1	8405 Glen Rd, Corona, CA 92883	68	68	69	0	1	1	B (67)	A/E	63	6	1	60	9	1	59	10	1	57	12	1	56	13	1	55	14	1	--	--	--	--	--	--	62	7	1
M16.07	0 (ST16.03)	16	SW1905 - A - Alt. Location	Residential / B	1	8600 Glen Rd, Corona, CA 92883	65	66	66	1	0	1	B (67)	A/E	66	0	0	66	0	0	66	0	0	66	0	0	66	0	0	66	0	0	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - $L_{eq}(h)$, dBA																																												
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, $L_{eq}(h)$, dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																	
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR
M16.14 / ST16.05	0 (ST16.05)	16		Undeveloped / G	--	N/A	69	69	71	0	2	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M16.15 / ST16.06	0 (ST16.06)	16		Hotel / E	--	Future address unknown	74	74	75	0	1	1	E (72)	N/A**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M16.16	0 (ST16.06)	16		Hotel pool / E	1	Future address unknown	64	64	65	0	1	1	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M16.17	0 (ST16.06)	16		Restaurant outdoor dining / E	2	Future address unknown	71	70	70	-1	0	-1	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M16.18	0 (ST16.06)	16		Retail / F	--	Future address unknown	48	46	47	-2	1	-1	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M16.19	0 (ST16.06)	16		Restaurant outdoor dining / E	1	Future address unknown	65	67	66	2	-1	1	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M17.01	0 (ST17.01)	17		Restaurant outdoor dining / E	1	2279 Eagle Glen Pkwy Unit D-106, Corona, CA 92883	48	50	51	2	1	3	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M17.02	0 (ST17.01)	17		Restaurant outdoor dining / E	1	3833 Bedford Canyon Rd STE 103, Corona, CA 92883	53	56	56	3	0	3	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M17.03 / ST17.01	0 (ST17.01)	17		Restaurant outdoor dining / E	1	2279 Eagle Glen Pkwy, Corona, CA 92883	68	69	69	1	0	1	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M17.04	0 (ST17.01)	17		Restaurant outdoor dining / E	1	3811 Bedford Canyon Rd Suite #108, Corona, CA 92883	50	52	52	2	0	2	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA																																										
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																															
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M17.05	0 (ST17.02)	17		Residential / B	1	20285 Bedford Canyon Rd, Corona, CA 92881	62	63	63	1	0	1	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M17.06	0 (ST17.02)	17		Residential / B	1	20285 Bedford Canyon Rd, Corona, CA 92881	63	65	65	2	0	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M17.07	0 (ST17.02)	17		Residential / B	5	20198 Orange St, Corona, CA 92881	67	69	69	2	0	2	B (67)	A/E	This receiver is shielded by an existing 12- to 14-foot noise barrier along the SB I-15 right-of-way and edge-of-shoulder. This barrier meets the requirements for feasibility and acoustical reasonableness when compared to the no-barrier condition. See Table B-2 for results.***																								--	--	--
M17.08 / ST17.02	0 (ST17.02)	17		Residential / B	2	20179 Orange St, Corona, CA 92881	64	66	66	2	0	2	B (67)	A/E	This receiver is shielded by an existing 12- to 14-foot noise barrier along the SB I-15 right-of-way and edge-of-shoulder. This barrier meets the requirements for feasibility and acoustical reasonableness when compared to the no-barrier condition. See Table B-2 for results.***																								--	--	--
M17.09	0 (ST17.02)	17		Residential / B	2	20141 Bedford Canyon Rd, Corona, CA 92881	60	62	62	2	0	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M17.10	0 (ST17.03)	17		Residential / B	2	20117 Bedford Canyon Rd, Corona, CA 92881	53	55	55	2	0	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M17.11	0 (ST17.03)	17		Residential / B	1	20088 Klyne St, Corona, CA 92881	66	68	68	2	0	2	B (67)	A/E	This receiver is shielded by an existing 12- to 14-foot noise barrier along the SB I-15 right-of-way and edge-of-shoulder. This barrier meets the requirements for feasibility and acoustical reasonableness when compared to the no-barrier condition. See Table B-2 for results.***																								--	--	--
M17.12 / ST17.03	0 (ST17.03)	17		Residential / B	3	20045 Bedford Canyon Rd, Corona, CA 92881	58	60	60	2	0	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M17.13	0 (ST17.04)	17		Residential / B	2	7430 Liberty Ave, Corona, CA 92881	65	66	66	1	0	1	B (67)	A/E	This receiver is shielded by an existing 12- to 14-foot noise barrier along the SB I-15 right-of-way and edge-of-shoulder. This barrier meets the requirements for feasibility and acoustical reasonableness when compared to the no-barrier condition. See Table B-2 for results.***																								--	--	--
M17.14 / ST17.04	0 (ST17.04)	17		Residential / B	2	19905 Bedford Canyon Rd, Corona, CA 92881	63	65	65	2	0	2	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M17.15	0 (ST17.04)	17		Residential / B	1	19835 Bedford Canyon Rd, Corona, CA 92881	67	68	68	1	0	1	B (67)	A/E	This receiver is shielded by an existing 12- to 14-foot noise barrier along the SB I-15 right-of-way and edge-of-shoulder. This barrier meets the requirements for feasibility and acoustical reasonableness when compared to the no-barrier condition. See Table B-2 for results.***																								--	--	--
M17.16	0 (ST17.04)	17		Undeveloped / G	--	7295 El Cerrito Rd, Corona, CA 92881	69	71	71	2	0	2	G (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA																																													
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																		
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M18.01	0 (ST18.01)	18		Outdoor seating area / E	1	2630 Tuscany St #102, Corona, CA 92881	56	58	58	2	0	2	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M18.02 / ST18.01	0 (ST18.01)	18		Retail facilities / F	--	2620 Tuscany St Ste 101, Corona, CA 92881	56	58	58	2	0	2	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M18.03	0 (ST18.01)	18		Outdoor dining / E	1	The Crossings 2470, Tuscany St #101, Corona, CA 92881	51	53	53	2	0	2	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M18.04 / ST18.02	0 (ST18.02)	18		Retail facilities / F	--	2415 Tuscany St, Corona, CA 92881	60	62	63	2	1	3	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M18.05	0 (ST18.02)	18		Parking lot / F	--	2415 Tuscany St, Corona, CA 92881	61	64	65	3	1	4	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M18.06	0 (ST18.02)	18		Hotel / E	--	Future address unknown	62	63	63	1	0	1	E (72)	N/A*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M18.07	0 (ST18.02)	18		Office Patio / E	1	17 Longitude Wy, Corona, CA 92881	60	58	59	-2	1	-1	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M18.08	0 (ST18.02)	18		Office Patio / E	1	14 Longitude Wy, Corona, CA 92881	59	49	50	-10	1	-9	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M18.09	0 (ST18.02)	18		Office Patio / E	1	14 Longitude Wy, Corona, CA 92881	59	48	48	-11	0	-11	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M18.10	0 (ST18.02)	18		Office Patio / E	1	15 Longitude Wy, Corona, CA 92881	57	57	57	0	0	0	E (72)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M18.11	0 (ST18.02)	18		Office / E	--	Future address unknown	74	77	77	3	0	3	E (72)	N/A*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - $L_{eq}(h)$, dBA																																													
Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, $L_{eq}(h)$, dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																																		
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR
M18.12	0 (ST18.03)	18	SW1996A - Mainline EOS	Residential / B	3	7540 Liberty Ave, Corona, CA 92881	71	73	72	2	-1	1	B (67)	A/E	72	0	0	72	0	0	72	0	0	72	0	0	72	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M18.13	0 (ST18.03)	18		Residential / B	3	19940 Katy Way, Corona, CA 92881	57	59	59	2	0	2	B (67)	NONE	59	0	0	59	0	0	59	0	0	59	0	0	59	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M18.14 / ST18.03	0 (ST18.03)	18		Residential / B	--	19941 Katy Way, Corona, CA 92881	67	68	69	1	1	2	B (67)	N/A**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M18.15	0 (ST18.03)	18		Residential / B	2	19829 Frances St, Corona, CA 92881	64	66	67	2	1	3	B (67)	A/E	67	0	0	67	0	0	67	0	0	67	0	0	67	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M18.16	0 (ST18.04)	18		Residential / B	2	19841 Frances St, Corona, CA 92881	65	66	67	1	1	2	B (67)	A/E	65	2	0	65	2	0	65	2	0	65	2	0	64	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M18.17	0 (ST18.04)	18		Residential / B	1	19829 Frances St, Corona, CA 92881	67	69	69	2	0	2	B (67)	A/E	68	1	0	67	2	0	66	3	0	66	3	0	66	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M18.18	0 (ST18.04)	18		Residential / B	4	19830 Frances St, Corona, CA 92881	59	60	60	1	0	1	B (67)	NONE	60	0	0	60	0	0	60	0	0	59	1	0	59	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M18.19 / ST18.04	0 (ST18.04)	18		Residential / B	2	19801 Frances St, Corona, CA 92881	67	69	69	2	0	2	B (67)	A/E	67	2	0	67	2	0	66	3	0	66	3	0	66	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M18.20	0 (ST18.04)	18		Residential / B	1	19800 Frances St, Corona, CA 92881	56	58	58	2	0	2	B (67)	NONE	57	1	0	57	1	0	57	1	0	57	1	0	57	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M18.21	0 (ST18.04)	18		Residential / B	1	7461 El Cerrito Rd, Corona, CA 92881	64	65	65	1	0	1	B (67)	NONE	63	2	0	63	2	0	62	3	0	62	3	0	62	3	0	--	--	--	--	--	--	--	--	--	--	--	--
M18.22	0 (ST18.04)	18		Residential / B	1	7429 El Cerrito Rd, Corona, CA 92881	65	67	67	2	0	2	B (67)	A/E	65	2	0	64	3	0	64	3	0	63	4	0	63	4	0	--	--	--	--	--	--	--	--	--	--	--	--
M18.12	0 (ST18.03)	18	SW1996B - Ramp EOS	Residential / B	3	7540 Liberty Ave, Corona, CA 92881	71	73	72	2	-1	1	B (67)	A/E	68	4	0	67	5	3	66	6	3	65	7	3	64	8	3	--	--	--	--	--	--	--	--	--	64	8	3
M18.13	0 (ST18.03)	18		Residential / B	3	19940 Katy Way, Corona, CA 92881	57	59	59	2	0	2	B (67)	NONE	57	2	0	56	3	0	56	3	0	55	4	0	54	5	3	--	--	--	--	--	--	--	--	--	54	5	3
M18.15	0 (ST18.03)	18		Residential / B	2	19829 Frances St, Corona, CA 92881	64	66	67	2	1	3	B (67)	A/E	62	5	2	62	5	2	61	6	2	60	7	2	60	7	2	--	--	--	--	--	--	--	--	--	60	7	2
M18.16	0 (ST18.04)	18		Residential / B	2	19841 Frances St, Corona, CA 92881	65	66	67	1	1	2	B (67)	A/E	64	3	0	64	3	0	63	4	0	62	5	2	61	6	2	--	--	--	--	--	--	--	--	--	61	6	2
M18.17	0 (ST18.04)	18		Residential / B	1	19829 Frances St, Corona, CA 92881	67	69	69	2	0	2	B (67)	A/E	65	4	0	64	5	1	63	6	1	63	6	1	63	6	1	--	--	--	--	--	--	--	--	--	63	6	1
M18.18	0 (ST18.04)	18		Residential / B	4	19830 Frances St, Corona, CA 92881	59	60	60	1	0	1	B (67)	NONE	60	0	0	60	0	0	59	1	0	59	1	0	59	1	0	--	--	--	--	--	--	--	--	--	59	1	0
M18.19 / ST18.04	0 (ST18.04)	18		Residential / B	2	19801 Frances St, Corona, CA 92881	67	69	69	2	0	2	B (67)	A/E	68	1	0	68	1	0	67	2	0	66	3	0	64	5	2	--	--	--	--	--	--	--	--	--	64	5	2
M18.20	0 (ST18.04)	18		Residential / B	1	19800 Frances St, Corona, CA 92881	56	58	58	2	0	2	B (67)	NONE	58	0	0	58	0	0	58	0	0	57	1	0	57	1	0	--	--	--	--	--	--	--	--	--	57	1	0
M18.21	0 (ST18.04)	18		Residential / B	1	7461 El Cerrito Rd, Corona, CA 92881	64	65	65	1	0	1	B (67)	NONE	65	0	0	65	0	0	65	0	0	65	0	0	65	0	0	--	--	--	--	--	--	--	--	--	65	0	0
M18.22	0 (ST18.04)	18		Residential / B	1	7429 El Cerrito Rd, Corona, CA 92881	65	67	67	2	0	2	B (67)	A/E	67	0	0	67	0	0	67	0	0	65	2	0	64	3	0	--	--	--	--	--	--	--	--	--	64	3	0

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA

Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR): 6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M18.12	0 (ST18.03)	18	SW1996C - ROW	Residential / B	3	7540 Liberty Ave, Corona, CA 92881	71	73	72	2	-1	1	B (67)	A/E	71	1	0	71	1	0	70	2	0	69	3	0	68	4	0	67	5	3	66	6	3	65	7	3	67	5	3
M18.13	0 (ST18.03)	18	SW1996C - ROW	Residential / B	3	19940 Katy Way, Corona, CA 92881	57	59	59	2	0	2	B (67)	NONE	59	0	0	58	1	0	58	1	0	57	2	0	57	2	0	56	3	0	55	4	0	55	4	0	56	3	0
M18.15	0 (ST18.03)	18	SW1996C - ROW	Residential / B	2	19829 Frances St, Corona, CA 92881	64	66	67	2	1	3	B (67)	A/E	67	0	0	67	0	0	67	0	0	67	0	0	65	2	0	63	4	0	62	5	2	61	6	2	62	5	2
M18.16	0 (ST18.04)	18	SW1996C - ROW	Residential / B	2	19841 Frances St, Corona, CA 92881	65	66	67	1	1	2	B (67)	A/E	67	0	0	67	0	0	66	1	0	66	1	0	66	1	0	66	1	0	66	1	0	65	2	0	66	1	0
M18.17	0 (ST18.04)	18	SW1996C - ROW	Residential / B	1	19829 Frances St, Corona, CA 92881	67	69	69	2	0	2	B (67)	A/E	69	0	0	66	3	0	65	4	0	64	5	1	63	6	1	62	7	1	61	8	1	61	8	1	61	8	1
M18.18	0 (ST18.04)	18	SW1996C - ROW	Residential / B	4	19830 Frances St, Corona, CA 92881	59	60	60	1	0	1	B (67)	NONE	60	0	0	60	0	0	60	0	0	60	0	0	60	0	0	60	0	0	60	0	0	60	0	0	60	0	0
M18.19 / ST18.04	0 (ST18.04)	18	SW1996C - ROW	Residential / B	2	19801 Frances St, Corona, CA 92881	67	69	69	2	0	2	B (67)	A/E	68	1	0	68	1	0	67	2	0	65	4	0	64	5	2	63	6	2	62	7	2	62	7	2	63	6	2
M18.20	0 (ST18.04)	18	SW1996C - ROW	Residential / B	1	19800 Frances St, Corona, CA 92881	56	58	58	2	0	2	B (67)	NONE	58	0	0	58	0	0	58	0	0	58	0	0	58	0	0	58	0	0	58	0	0	58	0	0	58	0	0
M18.21	0 (ST18.04)	18	SW1996C - ROW	Residential / B	1	7461 El Cerrito Rd, Corona, CA 92881	64	65	65	1	0	1	B (67)	NONE	65	0	0	65	0	0	65	0	0	65	0	0	65	0	0	65	0	0	64	1	0	63	2	0	64	1	0
M18.22	0 (ST18.04)	18	SW1996C - ROW	Residential / B	1	7429 El Cerrito Rd, Corona, CA 92881	65	67	67	2	0	2	B (67)	A/E	67	0	0	67	0	0	66	1	0	64	3	0	63	4	0	63	4	0	62	5	1	62	5	1	62	5	1
M18.12	0 (ST18.03)	18	SW1996 A+B - Combination Mainline & Ramp EOS	Residential / B	3	7540 Liberty Ave, Corona, CA 92881	71	73	72	2	-1	1	B (67)	A/E	68	4	0	67	5	3	66	6	3	65	7	3	64	8	3	--	--	--	--	--	--	--	--	--	64	8	3
M18.13	0 (ST18.03)	18	SW1996 A+B - Combination Mainline & Ramp EOS	Residential / B	3	19940 Katy Way, Corona, CA 92881	57	59	59	2	0	2	B (67)	NONE	57	2	0	56	3	0	56	3	0	55	4	0	54	5	3	--	--	--	--	--	--	--	--	--	54	5	3
M18.15	0 (ST18.03)	18	SW1996 A+B - Combination Mainline & Ramp EOS	Residential / B	2	19829 Frances St, Corona, CA 92881	64	66	67	2	1	3	B (67)	A/E	62	5	2	61	6	2	60	7	2	59	8	2	58	9	2	--	--	--	--	--	--	--	--	--	59	8	2
M18.16	0 (ST18.04)	18	SW1996 A+B - Combination Mainline & Ramp EOS	Residential / B	2	19841 Frances St, Corona, CA 92881	65	66	67	1	1	2	B (67)	A/E	63	4	0	62	5	2	61	6	2	60	7	2	59	8	2	--	--	--	--	--	--	--	--	--	59	8	2
M18.17	0 (ST18.04)	18	SW1996 A+B - Combination Mainline & Ramp EOS	Residential / B	1	19829 Frances St, Corona, CA 92881	67	69	69	2	0	2	B (67)	A/E	64	5	1	62	7	1	61	8	1	60	9	1	59	10	1	--	--	--	--	--	--	--	--	--	60	9	1
M18.18	0 (ST18.04)	18	SW1996 A+B - Combination Mainline & Ramp EOS	Residential / B	4	19830 Frances St, Corona, CA 92881	59	60	60	1	0	1	B (67)	NONE	59	1	0	59	1	0	58	2	0	58	2	0	58	2	0	--	--	--	--	--	--	--	--	--	58	2	0
M18.19 / ST18.04	0 (ST18.04)	18	SW1996 A+B - Combination Mainline & Ramp EOS	Residential / B	2	19801 Frances St, Corona, CA 92881	67	69	69	2	0	2	B (67)	A/E	66	3	0	66	3	0	64	5	2	63	6	2	62	7	2	--	--	--	--	--	--	--	--	--	62	7	2
M18.20	0 (ST18.04)	18	SW1996 A+B - Combination Mainline & Ramp EOS	Residential / B	1	19800 Frances St, Corona, CA 92881	56	58	58	2	0	2	B (67)	NONE	57	1	0	57	1	0	57	1	0	57	1	0	57	1	0	--	--	--	--	--	--	--	--	--	57	1	0
M18.21	0 (ST18.04)	18	SW1996 A+B - Combination Mainline & Ramp EOS	Residential / B	1	7461 El Cerrito Rd, Corona, CA 92881	64	65	65	1	0	1	B (67)	NONE	63	2	0	63	2	0	63	2	0	63	2	0	62	3	0	--	--	--	--	--	--	--	--	--	62	3	0
M18.22	0 (ST18.04)	18	SW1996 A+B - Combination Mainline & Ramp EOS	Residential / B	1	7429 El Cerrito Rd, Corona, CA 92881	65	67	67	2	0	2	B (67)	A/E	64	3	0	64	3	0	63	4	0	62	5	1	61	6	1	--	--	--	--	--	--	--	--	--	61	6	1

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - $L_{eq}(h)$, dBA

Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, $L_{eq}(h)$, dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																														
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR	$L_{eq}(h)$	I.L.	NBR
M19.01	0 (ST19.01)	19	SW2007A - Ramp EOS	Restaurant outdoor dining / E	1	1999 Foothill Pkwy, Corona, CA 92881	69	70	70	1	0	1	E (72)	NONE	70	0	0	70	0	0	70	0	0	70	0	0	70	0	0	--	--	--	--	--	--	--	--	--	70	0	0
M19.02 / ST19.01	0 (ST19.01)	19		Restaurant / E	--	1987 Foothill Pkwy, Corona, CA 92881	70	72	71	2	-1	1	E (72)	N/A**	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M19.03	0 (ST19.01)	19		Restaurant outdoor dining / E	1	1987 Foothill Pkwy, Corona, CA 92881	70	71	70	1	-1	0	E (72)	NONE	70	0	0	70	0	0	70	0	0	70	0	0	70	0	0	--	--	--	--	--	--	--	--	--	70	0	0
M19.04	0 (ST19.01)	19		Restaurant / E	--	1957 Foothill Pkwy Ste101, Corona, CA 92881	62	61	61	-1	0	-1	E (72)	N/A*	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M19.05	0 (ST19.02)	19		Residential / B	6	19740 Long Branch Way, Corona, CA 92881	64	63	63	-1	0	-1	B (67)	NONE	62	1	0	62	1	0	62	1	0	61	2	0	61	2	0	--	--	--	--	--	--	--	--	--	62	1	0
M19.06	0 (ST19.01)	19		Retail / F	--	1973 Foothill Pkwy Suite 104, Corona, CA 92881	52	53	53	1	0	1	F (-)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M19.07	0 (ST19.01)	19		Hotel patio / E	1	1961 Foothill Pkwy, Corona, CA 92881	74	75	75	1	0	1	E (72)	A/E	71	4	0	70	5	1	70	5	1	69	6	1	69	6	1	--	--	--	--	--	--	--	--	--	70	5	1
M19.08	0 (ST19.02)	19		Residential / B	3	7263 Calico Cir, Corona, CA 92881	68	66	66	-2	0	-2	B (67)	A/E	63	3	0	62	4	0	61	5	3	61	5	3	59	7	3	--	--	--	--	--	--	--	--	--	61	5	3
M19.09	0 (ST19.01)	19		Hotel pet relief / E	1	1961 Foothill Pkwy, Corona, CA 92881	75	77	77	2	0	2	E (72)	A/E	72	5	1	70	7	1	69	8	1	67	10	1	66	11	1	--	--	--	--	--	--	--	--	--	69	8	1
M19.10 / ST19.02	0 (ST19.02)	19		Residential / B	3	7303 Calico Cir, Corona, CA 92881	65	67	66	2	-1	1	B (67)	A/E	66	0	0	65	1	0	64	2	0	64	2	0	62	4	0	--	--	--	--	--	--	--	--	--	64	2	0
M19.11	0 (ST19.02)	19		Residential / B	3	7347 Calico Cir, Corona, CA 92881	64	66	65	2	-1	1	B (67)	NONE	65	0	0	65	0	0	65	0	0	65	0	0	65	0	0	--	--	--	--	--	--	--	--	--	65	0	0
M19.01	0 (ST19.01)	19	SW2007B - ROW	Restaurant outdoor dining / E	1	1999 Foothill Pkwy, Corona, CA 92881	69	70	70	1	0	1	E (72)	NONE	70	0	0	70	0	0	70	0	0	70	0	0	70	0	0	70	0	0	70	0	0	70	0	0	70	0	0
M19.03	0 (ST19.01)	19		Restaurant outdoor dining / E	1	1987 Foothill Pkwy, Corona, CA 92881	70	71	70	1	-1	0	E (72)	NONE	70	0	0	70	0	0	70	0	0	70	0	0	70	0	0	70	0	0	70	0	0	70	0	0	70	0	0
M19.05	0 (ST19.02)	19		Residential / B	6	19740 Long Branch Way, Corona, CA 92881	64	63	63	-1	0	-1	B (67)	NONE	63	0	0	63	0	0	63	0	0	62	1	0	62	1	0	62	1	0	62	1	0	62	1	0	62	1	0
M19.07	0 (ST19.01)	19		Hotel patio / E	1	1961 Foothill Pkwy, Corona, CA 92881	74	75	75	1	0	1	E (72)	A/E	75	0	0	75	0	0	73	2	0	72	3	0	71	4	0	70	5	1	70	5	1	69	6	1	70	5	1
M19.08	0 (ST19.02)	19		Residential / B	3	7263 Calico Cir, Corona, CA 92881	68	66	66	-2	0	-2	B (67)	A/E	66	0	0	66	0	0	65	1	0	65	1	0	63	3	0	62	4	0	61	5	3	60	6	3	61	5	3
M19.09	0 (ST19.01)	19		Hotel pet relief / E	1	1961 Foothill Pkwy, Corona, CA 92881	75	77	77	2	0	2	E (72)	A/E	77	0	0	77	0	0	77	0	0	75	2	0	71	6	1	69	8	1	67	10	1	66	11	1	67	10	1
M19.10 / ST19.02	0 (ST19.02)	19		Residential / B	3	7303 Calico Cir, Corona, CA 92881	65	67	66	2	-1	1	B (67)	A/E	66	0	0	66	0	0	66	0	0	65	1	0	65	1	0	64	2	0	63	3	0	62	4	0	63	3	0
M19.11	0 (ST19.02)	19		Residential / B	3	7347 Calico Cir, Corona, CA 92881	64	66	65	2	-1	1	B (67)	NONE	65	0	0	65	0	0	65	0	0	65	0	0	65	0	0	65	0	0	65	0	0	65	0	0	65	0	0

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA

Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)																										
															6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M19.01	0 (ST19.01)	19	SW2001 - Mainline EOS	Restaurant outdoor dining / E	1	1999 Foothill Pkwy, Corona, CA 92881	69	70	70	1	0	1	E (72)	NONE	69	1	0	68	2	0	68	2	0	68	2	0	68	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M19.03	0 (ST19.01)	19		Restaurant outdoor dining / E	1	1987 Foothill Pkwy, Corona, CA 92881	70	71	70	1	-1	0	E (72)	NONE	69	1	0	69	1	0	69	1	0	68	2	0	68	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M19.05	0 (ST19.02)	19		Residential / B	6	19740 Long Branch Way, Corona, CA 92881	64	63	63	-1	0	-1	B (67)	NONE	62	1	0	62	1	0	62	1	0	62	1	0	62	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M19.07	0 (ST19.01)	19		Hotel patio / E	1	1961 Foothill Pkwy, Corona, CA 92881	74	75	75	1	0	1	E (72)	A/E	74	1	0	74	1	0	74	1	0	74	1	0	74	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M19.08	0 (ST19.02)	19		Residential / B	3	7263 Calico Cir, Corona, CA 92881	68	66	66	-2	0	-2	B (67)	A/E	66	0	0	66	0	0	66	0	0	66	0	0	66	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M19.09	0 (ST19.01)	19		Hotel pet relief / E	1	1961 Foothill Pkwy, Corona, CA 92881	75	77	77	2	0	2	E (72)	A/E	77	0	0	77	0	0	76	1	0	76	1	0	76	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M19.10 / ST19.02	0 (ST19.02)	19		Residential / B	3	7303 Calico Cir, Corona, CA 92881	65	67	66	2	-1	1	B (67)	A/E	66	0	0	66	0	0	66	0	0	66	0	0	66	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M19.11	0 (ST19.02)	19		Residential / B	3	7347 Calico Cir, Corona, CA 92881	64	66	65	2	-1	1	B (67)	NONE	65	0	0	65	0	0	65	0	0	65	0	0	65	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M19.01	0 (ST19.01)	19	SW2001 + SW2007A - Combination Mainline & Ramp EOS	Restaurant outdoor dining / E	1	1999 Foothill Pkwy, Corona, CA 92881	69	70	70	1	0	1	E (72)	NONE	70	0	0	70	0	0	70	0	0	70	0	0	70	0	0	--	--	--	--	--	--	--	--	--	70	0	0
M19.03	0 (ST19.01)	19		Restaurant outdoor dining / E	1	1987 Foothill Pkwy, Corona, CA 92881	70	71	70	1	-1	0	E (72)	NONE	70	0	0	70	0	0	70	0	0	70	0	0	70	0	0	--	--	--	--	--	--	--	--	--	70	0	0
M19.05	0 (ST19.02)	19		Residential / B	6	19740 Long Branch Way, Corona, CA 92881	64	63	63	-1	0	-1	B (67)	NONE	62	1	0	62	1	0	61	2	0	61	2	0	61	2	0	--	--	--	--	--	--	--	--	--	62	1	0
M19.07	0 (ST19.01)	19		Hotel patio / E	1	1961 Foothill Pkwy, Corona, CA 92881	74	75	75	1	0	1	E (72)	A/E	71	4	0	70	5	1	70	5	1	68	7	1	68	7	1	--	--	--	--	--	--	--	--	--	70	5	1
M19.08	0 (ST19.02)	19		Residential / B	3	7263 Calico Cir, Corona, CA 92881	68	66	66	-2	0	-2	B (67)	A/E	63	3	0	62	4	0	61	5	3	61	5	3	59	7	3	--	--	--	--	--	--	--	--	--	61	5	3
M19.09	0 (ST19.01)	19		Hotel pet relief / E	1	1961 Foothill Pkwy, Corona, CA 92881	75	77	77	2	0	2	E (72)	A/E	72	5	1	70	7	1	69	8	1	67	10	1	66	11	1	--	--	--	--	--	--	--	--	--	69	8	1
M19.10 / ST19.02	0 (ST19.02)	19		Residential / B	3	7303 Calico Cir, Corona, CA 92881	65	67	66	2	-1	1	B (67)	A/E	66	0	0	65	1	0	64	2	0	64	2	0	62	4	0	--	--	--	--	--	--	--	--	--	64	2	0
M19.11	0 (ST19.02)	19		Residential / B	3	7347 Calico Cir, Corona, CA 92881	64	66	65	2	-1	1	B (67)	NONE	65	0	0	65	0	0	65	0	0	65	0	0	65	0	0	--	--	--	--	--	--	--	--	--	65	0	0
M19.08	0 (ST19.02)	19	SW2007C - Private Property	Residential / B	3	7263 Calico Cir, Corona, CA 92881	68	66	66	-2	0	-2	B (67)	A/E	61	5	3	60	6	3	59	7	3	58	8	3	58	8	3	57	9	3	--	--	--	--	--	--	59	7	3
M19.10 / ST19.02	0 (ST19.02)	19		Residential / B	3	7303 Calico Cir, Corona, CA 92881	65	67	66	2	-1	1	B (67)	A/E	63	3	0	62	4	0	61	5	3	61	5	3	60	6	3	60	6	3	--	--	--	--	--	--	61	5	3
M19.12	0 (ST19.03)	19		Residential / B	3	7375 Calico Cir, Corona, CA 92881	64	65	65	1	0	1	B (67)	NONE	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M19.13 / ST19.03	0 (ST19.03)	19		Residential / B	9	19476 Dry Gulch Rd, Corona, CA 92881	66	68	68	2	0	2	B (67)	A/E	This receiver is shielded by an existing 14- to 16-foot noise barrier along the SB I-15 right-of-way. This barrier meets the requirements for feasibility and acoustical reasonableness when compared to the no-barrier condition. See Table B-2 for results.***																										--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA

Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)	Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR): 6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
															L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M20.01	0 (ST20.01)	20	SW1998 - Mainline EOS	Sports park / C	1	7500 El Cerrito Rd, Corona, CA 92881	65	67	67	2	0	2	C (67)	A/E	65	2	0	65	2	0	65	2	0	65	2	0	65	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M20.02	0 (ST20.01)	20		Sports park / C	1	7500 El Cerrito Rd, Corona, CA 92881	63	65	65	2	0	2	C (67)	NONE	63	2	0	63	2	0	63	2	0	63	2	0	63	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M20.03 / ST20.01	0 (ST20.01)	20		Sports park / C	1	7500 El Cerrito Rd, Corona, CA 92881	64	65	65	1	0	1	C (67)	NONE	65	0	0	65	0	0	65	0	0	64	1	0	64	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M20.04	0 (ST20.01)	20		Sports park / C	1	7500 El Cerrito Rd, Corona, CA 92881	62	64	64	2	0	2	C (67)	NONE	63	1	0	63	1	0	63	1	0	63	1	0	63	1	0	--	--	--	--	--	--	--	--	--	--	--	--
M20.05	0 (ST20.01)	20		Sports park / C	2	7500 El Cerrito Rd, Corona, CA 92881	64	65	65	1	0	1	C (67)	NONE	65	0	0	65	0	0	65	0	0	65	0	0	65	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M20.06	0 (ST20.01)	20		Sports park / C	2	7500 El Cerrito Rd, Corona, CA 92881	64	65	65	1	0	1	C (67)	NONE	65	0	0	65	0	0	65	0	0	65	0	0	65	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M20.07	0 (ST20.01)	20		Sports park / C	1	7500 El Cerrito Rd, Corona, CA 92881	66	67	67	1	0	1	C (67)	A/E	67	0	0	67	0	0	67	0	0	67	0	0	67	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M20.08	0 (ST20.01)	20		Sports park / C	1	7500 El Cerrito Rd, Corona, CA 92881	65	66	66	1	0	1	C (67)	A/E	66	0	0	66	0	0	66	0	0	66	0	0	66	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M20.09	0 (ST20.01)	20		Sports park / C	1	7500 El Cerrito Rd, Corona, CA 92881	65	66	66	1	0	1	C (67)	A/E	66	0	0	66	0	0	66	0	0	66	0	0	66	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M20.10	0 (ST20.01)	20		Sports park / C	1	7500 El Cerrito Rd, Corona, CA 92881	65	66	66	1	0	1	C (67)	A/E	66	0	0	66	0	0	66	0	0	66	0	0	66	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M20.11	0 (ST20.01)	20		Sports park / C	1	7500 El Cerrito Rd, Corona, CA 92881	64	66	66	2	0	2	C (67)	A/E	66	0	0	66	0	0	66	0	0	66	0	0	66	0	0	--	--	--	--	--	--	--	--	--	--	--	--
M20.01	0 (ST20.01)	20	SW2006 - Ramp EOS	Sports park / C	1	7500 El Cerrito Rd, Corona, CA 92881	65	67	67	2	0	2	C (67)	A/E	66	1	0	66	1	0	66	1	0	65	2	0	65	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M20.02	0 (ST20.01)	20		Sports park / C	1	7500 El Cerrito Rd, Corona, CA 92881	63	65	65	2	0	2	C (67)	NONE	64	1	0	64	1	0	64	1	0	64	1	0	63	2	0	--	--	--	--	--	--	--	--	--	--	--	--
M20.03 / ST20.01	0 (ST20.01)	20		Sports park / C	1	7500 El Cerrito Rd, Corona, CA 92881	64	65	65	1	0	1	C (67)	NONE	64	1	0	63	2	0	62	3	0	61	4	0	61	4	0	--	--	--	--	--	--	--	--	--	--	--	--
M20.04	0 (ST20.01)	20		Sports park / C	1	7500 El Cerrito Rd, Corona, CA 92881	62	64	64	2	0	2	C (67)	NONE	62	2	0	62	2	0	61	3	0	60	4	0	60	4	0	--	--	--	--	--	--	--	--	--	--	--	--
M20.05	0 (ST20.01)	20		Sports park / C	2	7500 El Cerrito Rd, Corona, CA 92881	64	65	65	1	0	1	C (67)	NONE	63	2	0	63	2	0	62	3	0	61	4	0	60	5	2	--	--	--	--	--	--	--	--	--	--	--	--
M20.06	0 (ST20.01)	20		Sports park / C	2	7500 El Cerrito Rd, Corona, CA 92881	64	65	65	1	0	1	C (67)	NONE	63	2	0	63	2	0	62	3	0	61	4	0	60	5	2	--	--	--	--	--	--	--	--	--	--	--	--
M20.07	0 (ST20.01)	20		Sports park / C	1	7500 El Cerrito Rd, Corona, CA 92881	66	67	67	1	0	1	C (67)	A/E	65	2	0	64	3	0	63	4	0	62	5	1	61	6	1	--	--	--	--	--	--	--	--	--	--	--	--
M20.08	0 (ST20.01)	20		Sports park / C	1	7500 El Cerrito Rd, Corona, CA 92881	65	66	66	1	0	1	C (67)	A/E	65	1	0	64	2	0	62	4	0	61	5	1	61	5	1	--	--	--	--	--	--	--	--	--	--	--	--
M20.09	0 (ST20.01)	20		Sports park / C	1	7500 El Cerrito Rd, Corona, CA 92881	65	66	66	1	0	1	C (67)	A/E	64	2	0	63	3	0	62	4	0	61	5	1	60	6	1	--	--	--	--	--	--	--	--	--	--	--	--
M20.10	0 (ST20.01)	20		Sports park / C	1	7500 El Cerrito Rd, Corona, CA 92881	65	66	66	1	0	1	C (67)	A/E	64	2	0	64	2	0	62	4	0	61	5	1	61	5	1	--	--	--	--	--	--	--	--	--	--	--	--
M20.11	0 (ST20.01)	20		Sports park / C	1	7500 El Cerrito Rd, Corona, CA 92881	64	66	66	2	0	2	C (67)	A/E	64	2	0	63	3	0	62	4	0	61	5	1	60	6	1	--	--	--	--	--	--	--	--	--	--	--	--

I-15 ELPSE Project Worst Hour Noise Levels (Traffic Noise Only) - L_{eq}(h), dBA

Receiver I.D. / Measurement Location	Applied Validation Constant (Reference Measurement)	Noise Analysis Area	Noise Barrier I.D. & Location	Land Use	Number of Dwelling Units or Equivalent	Address	Existing Noise Level, L_{eq}(h), dBA	Design Year No-Build Noise Level, Leq(h), dBA	Design Year Build Noise Level, Leq(h), dBA	Design Year No-Build Noise Level minus Existing Conditions Leq(h), dBA	Design Year Build Noise Level minus No-Build Noise Level Leq(h), dBA	Design Year Build Noise Level minus Existing Conditions Leq(h), dBA	Activity Category (NAC)	Impact Type (None, or A/E)
M20.01	0 (ST20.01)	20	SW1998 + SW2006 - Combination Mainline & Ramp EOS	Sports park / C	1	7500 El Cerrito Rd, Corona, CA 92881	65	67	67	2	0	2	C (67)	A/E
M20.02	0 (ST20.01)	20		Sports park / C	1	7500 El Cerrito Rd, Corona, CA 92881	63	65	65	2	0	2	C (67)	NONE
M20.03 / ST20.01	0 (ST20.01)	20		Sports park / C	1	7500 El Cerrito Rd, Corona, CA 92881	64	65	65	1	0	1	C (67)	NONE
M20.04	0 (ST20.01)	20		Sports park / C	1	7500 El Cerrito Rd, Corona, CA 92881	62	64	64	2	0	2	C (67)	NONE
M20.05	0 (ST20.01)	20		Sports park / C	2	7500 El Cerrito Rd, Corona, CA 92881	64	65	65	1	0	1	C (67)	NONE
M20.06	0 (ST20.01)	20		Sports park / C	2	7500 El Cerrito Rd, Corona, CA 92881	64	65	65	1	0	1	C (67)	NONE
M20.07	0 (ST20.01)	20		Sports park / C	1	7500 El Cerrito Rd, Corona, CA 92881	66	67	67	1	0	1	C (67)	A/E
M20.08	0 (ST20.01)	20		Sports park / C	1	7500 El Cerrito Rd, Corona, CA 92881	65	66	66	1	0	1	C (67)	A/E
M20.09	0 (ST20.01)	20		Sports park / C	1	7500 El Cerrito Rd, Corona, CA 92881	65	66	66	1	0	1	C (67)	A/E
M20.10	0 (ST20.01)	20		Sports park / C	1	7500 El Cerrito Rd, Corona, CA 92881	65	66	66	1	0	1	C (67)	A/E
M20.11	0 (ST20.01)	20		Sports park / C	1	7500 El Cerrito Rd, Corona, CA 92881	64	66	66	2	0	2	C (67)	A/E
M20.12	0 (ST20.02)	20		Residential / B	5	7285 Piute Creek Dr, Corona, CA 92881	62	63	63	1	0	1	B (67)	NONE
M20.13 / ST20.02	0 (ST20.02)	20		Residential / B	6	7267 Piute Creek Dr, Corona, CA 92881	61	62	62	1	0	1	B (67)	NONE

Noise Prediction with Barrier, Barrier Insertion Loss (I.L.), and Number of Benefited Receivers (NBR)

Receiver I.D. / Measurement Location	6 feet			8 feet			10 feet			12 feet			14 feet			16 feet			18 feet			20 feet			Design Barrier		
	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR	L_{eq}(h)	I.L.	NBR
M20.01	65	2	0	64	3	0	64	3	0	63	4	0	63	4	0	--	--	--	--	--	--	--	--	--	--	--	--
M20.02	63	2	0	63	2	0	62	3	0	61	4	0	61	4	0	--	--	--	--	--	--	--	--	--	--	--	--
M20.03 / ST20.01	63	2	0	63	2	0	62	3	0	60	5	1	60	5	1	--	--	--	--	--	--	--	--	--	--	--	--
M20.04	62	2	0	61	3	0	60	4	0	59	5	1	58	6	1	--	--	--	--	--	--	--	--	--	--	--	--
M20.05	63	2	0	62	3	0	61	4	0	60	5	2	59	6	2	--	--	--	--	--	--	--	--	--	--	--	--
M20.06	63	2	0	62	3	0	61	4	0	60	5	2	59	6	2	--	--	--	--	--	--	--	--	--	--	--	--
M20.07	65	2	0	64	3	0	63	4	0	62	5	1	61	6	1	--	--	--	--	--	--	--	--	--	--	--	--
M20.08	65	1	0	64	2	0	62	4	0	61	5	1	61	5	1	--	--	--	--	--	--	--	--	--	--	--	--
M20.09	64	2	0	63	3	0	62	4	0	61	5	1	60	6	1	--	--	--	--	--	--	--	--	--	--	--	--
M20.10	64	2	0	64	2	0	62	4	0	61	5	1	61	5	1	--	--	--	--	--	--	--	--	--	--	--	--
M20.11	64	2	0	63	3	0	62	4	0	61	5	1	60	6	1	--	--	--	--	--	--	--	--	--	--	--	--
M20.12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
M20.13 / ST20.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

EOS = edge of shoulder. ROW = right of way

Interior noise levels are estimated from exterior noise levels using building noise reduction factors from Table 6 of *Highway Traffic Noise: Analysis and Abatement Guidance* (FHWA 2011). 20 dB exterior-to-interior noise reduction is assumed at M03.05. This corresponds to light frame construction with ordinary sash windows; which is likely a conservative estimate because the building has a brick facade.

* The are no outdoor areas of frequent human use that would benefit from a lowered noise level at this receiver. Therefore, no impact is assessed.

** This receiver was used for model validation purposes only and does not accurately represent the primary area of outdoor human use. Nearby modeled receiver(s) are used to assess impacts at this land use.

*** The feasibility and acoustical reasonableness of existing noise barriers were assessed in accordance with Caltrans 2020 Traffic Noise Analysis Protocol, Appendix E, Supplemental Guidance to the Protocol, Evaluation of Existing Barriers.

++ The 1 dBA reduction in noise in the Build condition is due to a 0.2 dBA discrepancy that is forcing the results to round down.

Appendix C

Design Barrier Cost Screening and Cost Estimate Details

I-15 ELPSE NOISE BARRIER COST DEVELOPMENT & THREE-STEP SCREENING

Noise Barrier Cost Screening - Step 1A

Includes Masonry Block Wall Cost Only

Basic Cost of Masonry Block per 1,000' of Wall

		Barrier Height	6 ft		8 ft		10 ft		12 ft		14 ft		16 ft		18 ft		20 ft	
Code	Description	Unit	Unit Price	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost
582001	Soundwall (Masonry Block)	SQFT	$45.00	6,500	$292,500	8,500	$382,500	10,500	$472,500	12,500	$562,500	14,500	$652,500	16,500	$742,500	18,500	$832,500	20,500	$922,500
				Cost per LF	$293		$383		$473		$563		$653		$743		$833		$923

Base Cost Allowance per Benefitted Receptor: **$146,000**

No.	Barrier ID	Location	Benefitted Receptors	Reasonable Allowance	H=6		H=8		H=10		H=12		H=14		H=16		H=18		H=20		Basic Barrier Cost	Less than Allowance?	% Over / Under Allowance
					Length	Cost	Length	Cost	Length	Cost	Length	Cost	Length	Cost	Length	Cost	Length	Cost	Length	Cost			
1	SW1109A +	ES	1	$146,000							407	$229,141									$553,750	No	379%
	SW1109B	ES			32	$9,376			257	$121,561	344	$193,672											
2	SW1137B	Private Prop	1	$146,000									65	$42,445	149	$110,707					$153,152	No	105%
3	SW1142B	R/W	2	$292,000					50	$23,650	50	$28,150	25	$16,325	100	$74,300	100	$83,300	401	$370,123	$595,848	No	204%
4	SW1204	Private Prop	1	$146,000			241	$92,303													$92,303	Yes	63%
5	SW1208B	Private Prop	2	$292,000					322	$152,306	53	$29,839									$182,145	Yes	62%
6	SW1208D	ROW	2	$292,000									14	$9,142			755	$628,915	326	$300,898	$938,955	No	322%
7	SW1210	Private Prop	1	$146,000			85	$32,555	50	$23,650											$56,205	Yes	38%
8	SW1212	Private Prop	3	$438,000							112	$63,056	374	$244,222							$307,278	Yes	70%
9	SW1214A	Btw ES & ROW	10	$1,460,000							1,700	$957,100	801	$523,053							$1,480,153	No	101%
10	SW1214B	Private Prop	9	$1,314,000	1,880	$550,840	244	$93,452													$644,292	Yes	49%
11	SW1214C	ES	10	$1,460,000					1,800	$851,400	500	$281,500	201	$131,253							$1,264,153	Yes	87%
12	SW1214D	R/W	9	$1,314,000							237	$133,431	164	$107,092	41	$30,463	1,656	$1,379,448	370	$341,510	$1,991,944	No	152%
13	SW1226A	ES	12	$1,752,000					100	$47,300	1,950	$1,097,850	801	$523,053							$1,668,203	Yes	95%
14	SW1226B	Btw ES & R/W	12	$1,752,000							1,300	$731,900	1,500	$979,500							$1,711,400	Yes	98%
15	SW1226C	ROW	11	$1,606,000													2,182	$1,817,606	649	$599,027	$2,416,633	No	150%
16	SW1238	Private Prop	1	$146,000			215	$82,345	76	$35,948											$118,293	Yes	81%
17	SW1521C	Private Prop	1	$146,000					82	$38,786	129	$72,627	74	$48,322	100	$74,274					$234,009	No	160%
18	SW1691	Private Prop	1	$146,000	76	$22,268															$22,268	Yes	15%
19	SW1693	Private Prop	1	$146,000	151	$44,243															$44,243	Yes	30%
20	SW1751B	Private Prop	1	$146,000	88	$25,784	26	$9,958													$35,742	Yes	24%
21	SW1784B	Private Prop	1	$146,000			304	$116,432													$116,432	Yes	80%
22	SW1789	Private Prop	1	$146,000			164	$62,812													$62,812	Yes	43%
23	SW1823	Private Prop	10	$1,460,000	25	$7,325	26	$9,958	14	$6,622	273	$153,699	405	$264,465							$442,069	Yes	30%
24	SW1831	Private Prop	3	$438,000			52	$19,916	347	$164,131											$184,047	Yes	42%
25	SW1833	Private Prop	2	$292,000	14	$4,102					192	$108,096									$112,198	Yes	38%
26	SW1839	Private Prop	7	$1,022,000	250	$73,250			44	$20,812	152	$85,576	110	$71,830	118	$87,674					$339,142	Yes	33%
27	SW1872	R/W	3	$438,000							107	$60,241	353	$230,509	202	$150,062					$440,812	No	101%
28	SW1874	ES	2	$292,000	100	$29,300	116	$44,428	384	$181,632											$255,360	Yes	87%
29	SW1874 +	ES	3	$438,000	100	$29,300			600	$283,800											$546,058	No	125%
	SW1878	ES					176	$67,408	350	$165,550													
30	SW1875	Private Prop	1	$146,000	120	$35,160															$35,160	Yes	24%
31	SW1890A +	ES	65	$9,490,000			50	$19,150	50	$23,650	100	$56,300	1,350	$881,550							$1,742,625	Yes	18%
	SW1890B	ES			26	$7,618					100	$56,300	1,069	$698,057									
32	SW1890A +	ES	92	$13,432,000					100	$47,300	50	$28,150	1,450	$946,850							$2,035,517	Yes	15%
	SW1890C	ES-R/W									30	$16,890	149	$97,297	1,210	$899,030							
33	SW1895	Private Prop	1	$146,000	64	$18,752															$18,752	Yes	13%
34	SW1899	Private Prop	1	$146,000	48	$14,064															$14,064	Yes	10%
35	SW1903	R/W	2	$292,000					141	$66,693					65	$48,295	539	$448,987	449	$414,427	$978,402	No	335%
36	SW1905	Private Prop	1	$146,000	23	$6,739	39	$14,937													$21,676	Yes	15%
37	SW1907	Private Prop	1	$146,000	62	$18,166	16	$6,128													$24,294	Yes	17%
38	SW1911	ES	1	$146,000					197	$93,181			967	$631,451							$724,632	No	496%
39	SW1913	Private Prop	1	$146,000	155	$45,415	17	$6,511													$51,926	Yes	36%
40	SW1996A +	ES	14	$2,044,000	98	$28,714			49	$23,177	49	$27,587	390	$254,670							$1,270,912	Yes	62%
	SW1996B	ES									25	$14,075	1,413	$922,689									
41	SW1996B	ES	13	$1,898,000					49	$23,177	81	$45,603	1,381	$901,793							$970,573	Yes	51%
42	SW1996C	R/W	9	$1,314,000									98	$63,994	197	$146,371	987	$822,171			$1,032,536	Yes	79%
43	SW2001 +	ES	5	$730,000	256	$75,008															$363,372	Yes	50%
	SW2007A	ES			50	$14,650	49	$18,767	539	$254,947													
44	SW2007A	ES	5	$730,000			287	$109,921	401	$189,673											$299,594	Yes	41%
45	SW2007B	R/W	5	$730,000									194	$126,682			399	$332,367			$459,049	Yes	63%
46	SW2007C	Private Prop	6	$876,000	144	$42,192	154	$58,982	340	$160,820											$261,994	Yes	30%

46 Total Number of Barriers

Number of barriers that pass Step 1A of the basic cost screening: **34**

I-15 ELPSE NOISE BARRIER COST DEVELOPMENT & THREE-STEP SCREENING

Noise Barrier Cost Screening - Step 1B

Includes Masonry Block Wall and Foundation Costs Only

Basic Items Cost for Masonry Block on Pile Cap per 1,000' of Wall

		Barrier Height		6 ft		8 ft		10 ft		12 ft		14 ft		16 ft		18 ft		20 ft	
Code	Description	Unit	Unit Price	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30)*	LF	$150.00	814	$122,025	939	$140,775	1,068	$160,150	1,334	$200,150	1,601	$240,150	2,001	$300,150	2,001	$300,150	2,001	$300,150
510061	Structural Concrete, Soundwall (Pile Cap)	CY	$1,500.00	97.2	$145,834	97.2	$145,834	97.2	$145,834	97.2	$145,834	97.2	$145,834	97.2	$145,834	97.2	$145,834	97.2	$145,834
520101	Bar Reinforcing Steel (Pile Cap)*	LB	$5.72	13,917	$79,605	13,917	$79,605	13,989	$80,016	14,276	$81,661	14,564	$83,307	14,995	$85,774	14,995	$85,774	14,995	$85,774
582001	Soundwall (Masonry Block)	SQFT	$45.00	6,500	$292,500	8,500	$382,500	10,500	$472,500	12,500	$562,500	14,500	$652,500	16,500	$742,500	18,500	$832,500	20,500	$922,500
			Cost per 1,000' of wall		$639,964		$748,714		$858,500		$990,145		$1,121,791		$1,274,258		$1,364,258		$1,454,258
			Cost per LF		$640		$749		$859		$991		$1,122		$1,275		$1,365		$1,455

Notes:

* For 18 ft and 20 ft wall heights the spacing for CIDH and pile cap reinforcing steel for 16 ft walls is used since the Standard plans only cover up to 16 ft high walls.

Basic Items Cost for Masonry Block on Type 836S Barrier per 1,000' of Wall

		Barrier Height		6 ft		8 ft		10 ft		12 ft		14 ft		16 ft		18 ft		20 ft	
Code	Description	Unit	Unit Price	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost
192001	Structure Excavation (3' wide x 3' deep)	CY	$155.00	333.3	$51,667	333.3	$51,667	333.3	$51,667	333.3	$51,667	333.3	$51,667	333.3	$51,667	333.3	$51,667	333.3	$51,667
193001	Structure Backfill (1.5' wide x 3' deep)	CY	$160.00	166.7	$26,667	166.7	$26,667	166.7	$26,667	166.7	$26,667	166.7	$26,667	166.7	$26,667	166.7	$26,667	166.7	$26,667
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30, L = 16')*	LF	$150.00	2,561	$384,150	2,561	$384,150	2,955	$443,227	3,201	$480,150	3,492	$523,787	3,841	$576,150	3,841	$576,150	3,841	$576,150
582001	Soundwall (Masonry Block)	SQFT	$45.00	3,000	$135,000	5,000	$225,000	7,000	$315,000	9,000	$405,000	11,000	$495,000	13,000	$585,000	15,000	$675,000	17,000	$765,000
839741	Type 836S Barrier (Case 2, He=3')	LF	$450.00	1,000	$450,000	1,000	$450,000	1,000	$450,000	1,000	$450,000	1,000	$450,000	1,000	$450,000	1,000	$450,000	1,000	$450,000
			Cost per 1,000' of wall		$1,047,484		$1,137,484		$1,286,561		$1,413,484		$1,547,121		$1,689,484		$1,779,484		$1,869,484
			Cost per LF		$1,048		$1,138		$1,287		$1,414		$1,548		$1,690		$1,780		$1,870

Notes:

* For 6 ft walls the spacing for CIDH of 8 ft walls is used since the Standard plans only cover heights from 8 ft walls. For 18 ft and 20 ft height walls the spacing for CIDH of 16 ft walls is used since the Standard plans only cover up to 16 ft high walls.

Basic Items Cost for Masonry Block on Trench Footing Case 1 per 1,000' of Wall

		Barrier Height		6 ft		8 ft		10 ft		12 ft		14 ft		16 ft		18 ft		20 ft	
		Footing Depth*		4.25 ft		5. ft		5.75 ft		6.5 ft		7.25 ft		7.75 ft		8.25 ft		8.75 ft	
Code	Description	Unit	Unit Price	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost
192001	Structure Excavation ([1'+3' on each side] x [footing depth+0.5'])	CY	$155.00	1,231.5	$190,880	1,425.9	$221,019	1,620.4	$251,158	1,814.8	$281,297	2,009.3	$311,436	2,138.9	$331,528	2,268.5	$351,621	2,398.1	$371,713
193001	Structure Backfill (6' x [footing depth + 0.5'])	CY	$160.00	1,055.6	$168,889	1,222.2	$195,556	1,388.9	$222,223	1,555.6	$248,889	1,722.2	$275,556	1,833.3	$293,334	1,944.4	$311,112	2,055.6	$328,889
490801	Steel Sheet Piling (Temporary Shoring)	SQFT	$80.00	13,000	$1,040,000	17,000	$1,360,000	21,000	$1,680,000	25,000	$2,000,000	29,000	$2,320,000	33,000	$2,640,000	37,000	$2,960,000	41,000	$3,280,000
510061	Structural Concrete, Soundwall (Trench Footing, Φ = 30)	CY	$1,500.00	157.4	$236,112	185.2	$277,778	213.0	$319,445	240.7	$361,112	268.5	$402,778	287.0	$430,556	305.6	$458,334	324.1	$486,112
520101	Bar Reinforcing Steel (Trench Footing, Φ = 30)	LB	$5.72	5,344	$30,568	12,442	$71,169	13,193	$75,464	19,875	$113,685	21,048	$120,395	29,036	$166,086	31,882	$182,366	41,545	$237,638
582001	Soundwall (Masonry Block)	SQFT	$45.00	6,500	$292,500	8,500	$382,500	10,500	$472,500	12,500	$562,500	14,500	$652,500	16,500	$742,500	18,500	$832,500	20,500	$922,500
			Cost per 1,000' of wall		$1,958,949		$2,508,022		$3,020,790		$3,567,483		$4,082,665		$4,604,004		$5,095,933		$5,626,852
			Cost per LF		$1,959		$2,509		$3,021		$3,568		$4,083		$4,605		$5,096		$5,627

Notes:

* For 18 ft and 20 ft wall heights the depth of footing is determined using the increments between the 14' and 16' wall heights.

Basic Items Cost for Masonry Block on Trench Footing Case 2 per 1,000' of Wall

		Barrier Height		6 ft		8 ft		10 ft		12 ft		14 ft		16 ft		18 ft		20 ft	
		Footing Depth*		7.75 ft		8.75 ft		10. ft		11. ft		11.75 ft		12.75 ft		13.75 ft		14.75 ft	
Code	Description	Unit	Unit Price	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost
192001	Structure Excavation ([1.25'+3' on each side] x [footing depth+0.5'])	CY	$155.00	2,215.3	$343,369	2,483.8	$384,989	2,819.4	$437,014	3,088.0	$478,635	3,289.4	$509,850	3,557.9	$551,470	3,826.4	$593,091	4,094.9	$634,711
193001	Structure Backfill (6' x [footing depth + 0.5'])	CY	$160.00	1,833.3	$293,334	2,055.6	$328,889	2,333.3	$373,334	2,555.6	$408,889	2,722.2	$435,556	2,944.4	$471,112	3,166.7	$506,667	3,388.9	$542,223
490801	Steel Sheet Piling (Temporary Shoring)	SQFT	$80.00	13,000	$1,040,000	17,000	$1,360,000	21,000	$1,680,000	25,000	$2,000,000	29,000	$2,320,000	33,000	$2,640,000	37,000	$2,960,000	41,000	$3,280,000
510061	Structural Concrete, Soundwall (Trench Footing, Φ = 30)	CY	$1,500.00	287.0	$430,556	324.1	$486,112	370.4	$555,556	407.4	$611,112	435.2	$652,778	472.2	$708,334	509.3	$763,889	546.3	$819,445
520101	Bar Reinforcing Steel (Trench Footing, Φ = 30)	LB	$5.72	9,352	$53,494	20,207	$115,585	22,796	$130,394	30,923	$176,880	33,433	$191,237	46,981	$268,732	49,618	$283,815	66,621	$381,073
582001	Soundwall (Masonry Block)	SQFT	$45.00	6,500	$292,500	8,500	$382,500	10,500	$472,500	12,500	$562,500	14,500	$652,500	16,500	$742,500	18,500	$832,500	20,500	$922,500
			Cost per 1,000' of wall		$2,453,253		$3,058,075		$3,648,798		$4,238,016		$4,761,921		$5,382,148		$5,939,962		$6,579,952
			Cost per LF		$2,454		$3,059		$3,649		$4,239		$4,762		$5,383		$5,940		$6,580

Notes:

* For 18 ft and 20 ft wall heights the depth of footing is determined using the increments between the 14' and 16' wall heights.

I-15 ELPSE NOISE BARRIER COST DEVELOPMENT & THREE-STEP SCREENING

Noise Barrier Cost Screening - Step 1B

Includes Masonry Block Wall and Foundation Costs Only

Basic Items Cost for Masonry Block on Spread Footing Case 1 per 1,000' of Wall

		Barrier Height		6 ft		8 ft		10 ft		12 ft		14 ft		16 ft		18 ft		20 ft	
		Footing Width*		3.25 ft		4. ft		5. ft		5.75 ft		6.5 ft		7.5 ft		8.5 ft		9.5 ft	
Code	Description	Unit	Unit Price	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost
192001	Structure Excavation (1.5' x [footing width + 2'])	CY	$155.00	291.7	$45,209	333.3	$51,667	388.9	$60,278	430.6	$66,737	472.2	$73,195	527.8	$81,806	583.3	$90,417	638.9	$99,028
193001	Structure Backfill (Str Excavation - [footing width x 1'/27])	CY	$160.00	171.3	$27,408	185.2	$29,630	203.7	$32,593	217.6	$34,815	231.5	$37,038	250.0	$40,000	268.5	$42,963	287.0	$45,926
510061	Structural Concrete, Soundwall (Spread Footing)	CY	$1,500.00	120.4	$180,556	148.1	$222,223	185.2	$277,778	213.0	$319,445	240.7	$361,112	277.8	$416,667	314.8	$472,223	351.9	$527,778
520101	Bar Reinforcing Steel (Spread Footing, Case 1)	LB	$5.72	9,774	$55,908	10,618	$60,735	11,743	$67,170	12,587	$71,998	17,930	$102,560	21,141	$120,927	23,016	$131,652	24,891	$142,377
582001	Soundwall (Masonry Block)	SQFT	$45.00	6,500	$292,500	8,500	$382,500	10,500	$472,500	12,500	$562,500	14,500	$652,500	16,500	$742,500	18,500	$832,500	20,500	$922,500
			Cost per 1,000' of wall		$601,581		$746,755		$910,319		$1,055,495		$1,226,405		$1,401,900		$1,569,755		$1,737,609
			Cost per LF		$602		$747		$911		$1,056		$1,227		$1,402		$1,570		$1,738

Notes:

* For 18 ft and 20 ft wall heights the width of footing is determined using the increments between the 14' and 16' wall heights.

Basic Items Cost for Masonry Block on Spread Footing Case 2 per 1,000' of Wall

		Barrier Height		6 ft		8 ft		10 ft		12 ft		14 ft		16 ft		18 ft		20 ft	
		Footing Width*		3.25 ft		4. ft		5. ft		5.75 ft		6.5 ft		7.5 ft		8.5 ft		9.5 ft	
Code	Description	Unit	Unit Price	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost
192001	Structure Excavation (1.5' x [footing width + 2'])	CY	$155.00	291.7	$45,209	333.3	$51,667	388.9	$60,278	430.6	$66,737	472.2	$73,195	527.8	$81,806	583.3	$90,417	638.9	$99,028
193001	Structure Backfill (Str Excavation - [footing width x 1'/27])	CY	$160.00	171.3	$27,408	185.2	$29,630	203.7	$32,593	217.6	$34,815	231.5	$37,038	250.0	$40,000	268.5	$42,963	287.0	$45,926
510061	Structural Concrete, Soundwall (Spread Footing)	CY	$1,500.00	120.4	$180,556	148.1	$222,223	185.2	$277,778	213.0	$319,445	240.7	$361,112	277.8	$416,667	314.8	$472,223	351.9	$527,778
520101	Bar Reinforcing Steel (Spread Footing, Case 2)	LB	$5.72	11,110	$63,550	11,954	$68,377	13,079	$74,812	13,923	$79,640	19,266	$110,202	22,477	$128,569	24,352	$139,294	26,227	$150,019
582001	Soundwall (Masonry Block)	SQFT	$45.00	6,500	$292,500	8,500	$382,500	10,500	$472,500	12,500	$562,500	14,500	$652,500	16,500	$742,500	18,500	$832,500	20,500	$922,500
			Cost per 1,000' of wall		$609,223		$754,397		$917,961		$1,063,137		$1,234,047		$1,409,542		$1,577,397		$1,745,251
			Cost per LF		$610		$755		$918		$1,064		$1,235		$1,410		$1,578		$1,746

Notes:

* For 18 ft and 20 ft wall heights the width of footing is determined using the increments between the 14' and 16' wall heights.

I-15 ELPSE NOISE BARRIER COST DEVELOPMENT & THREE-STEP SCREENING

Noise Barrier Cost Screening - Step 1B

Includes Masonry Block Wall and Foundation Costs Only

Summary of Soundwall Basic Costs per Linear Foot (Masonry block + Foundation only)

	Wall Height							
Type	**6 ft**	**8 ft**	**10 ft**	**12 ft**	**14 ft**	**16 ft**	**18 ft**	**20 ft**
Masonry Block on Pile Cap	$640	$749	$859	$991	$1,122	$1,275	$1,365	$1,455
Masonry Block on Type 836S Barrier	$1,048	$1,138	$1,287	$1,414	$1,548	$1,690	$1,780	$1,870
Masonry Block on Trench Footing Case 1	$1,959	$2,509	$3,021	$3,568	$4,083	$4,605	$5,096	$5,627
Masonry Block on Trench Footing Case 2	$2,454	$3,059	$3,649	$4,239	$4,762	$5,383	$5,940	$6,580
Masonry Block on Spread Footing Case 1	$602	$747	$911	$1,056	$1,227	$1,402	$1,570	$1,738
Masonry Block on Spread Footing Case 2	$610	$755	$918	$1,064	$1,235	$1,410	$1,578	$1,746

Notes:
The following table includes a cost summary of the 34 barriers that passed the Step 1A cost reasonableness screening.
At most locations where pile cap barrier foundation is proposed is due to existing slope on one side of the barrier, and to avoid the need to shift the barrier away from the slope which reduces the usable area on the receptor side.
TCE and other costs have not been added to the basic barrier costs on this table. See Step 2 cost screening table for more detailed costs.

Base Cost Allowance per Benefitted Receptor: $146,000

				Benefitted	Reasonable	H=6		H=8		H=10		H=12		H=14		H=16		H=18		H=20		Basic Barrier	Less than	% Over / Under
No.	**Barrier ID**	**Type**	**Location**	**Receptors**	**Allowance**	**Length**	**Cost**	**Length**	**Cost**	**Length**	**Cost**	**Length**	**Cost**	**Length**	**Cost**	**Length**	**Cost**	**Length**	**Cost**	**Length**	**Cost**	**Cost**	**Allowance?**	**Allowance**
4	SW1204	Masonry Block on Pile Cap	Private Prop	1	$146,000			241	$180,509													$180,509	No	124%
5	SW1208B	Masonry Block on Pile Cap	Private Prop	2	$292,000					322	$276,598	53	$52,523									$329,121	No	113%
7	SW1210	Masonry Block on Pile Cap	Private Prop	1	$146,000			85	$63,665	50	$42,950											$106,615	Yes	73%
8	SW1212	Masonry Block on Pile Cap	Private Prop	3	$438,000							112	$110,992	374	$419,628							$530,620	No	121%
10	SW1214B	Masonry Block on Pile Cap	Private Prop	9	$1,314,000	1,880	$1,203,200	244	$182,756													$1,385,956	No	105%
11	SW1214C	Masonry Block on Type 836S Barrier	ES	10	$1,460,000			100	$113,800	1,600	$2,059,200	500	$707,000	301	$465,948							$3,345,948	No	229%
13	SW1226A	Masonry Block on Type 836S Barrier	ES	12	$1,752,000					100	$128,700	1,950	$2,757,300	801	$1,239,948							$4,125,948	No	235%
14	SW1226B	Masonry Block on Type 836S Barrier	Btw ES & R/W	12	$1,752,000							1,300	$1,838,200	1,500	$2,322,000							$4,160,200	No	237%
16	SW1238	Masonry Block on Spread Footing Case 2	Private Prop	1	$146,000			215	$162,325	76	$69,768											$232,093	No	159%
18	SW1691	Masonry Block on Pile Cap	Private Prop	1	$146,000	76	$48,640															$48,640	Yes	33%
19	SW1693	Masonry Block on Pile Cap	Private Prop	1	$146,000	151	$96,640															$96,640	Yes	66%
20	SW1751B	Masonry Block on Pile Cap	Private Prop	1	$146,000	88	$56,320	26	$19,474													$75,794	Yes	52%
21	SW1784B	Masonry Block on Spread Footing Case 1	Private Prop	1	$146,000			304	$227,088													$227,088	No	156%
22	SW1789	Masonry Block on Spread Footing Case 2	Private Prop	1	$146,000			164	$122,508													$122,508	Yes	84%
23	SW1823	Masonry Block on Pile Cap	Private Prop	10	$1,460,000	25	$16,000	26	$19,474	14	$12,026	273	$270,543	405	$454,410							$772,453	Yes	53%
24	SW1831	Masonry Block on Pile Cap	Private Prop	3	$438,000			52	$38,948	347	$298,073											$337,021	Yes	77%
25	SW1833	Masonry Block on Pile Cap	Private Prop	2	$292,000	14	$8,960					192	$190,272									$199,232	Yes	68%
26	SW1839	Masonry Block on Pile Cap	Private Prop	7	$1,022,000	250	$160,000			44	$37,796	152	$150,632	110	$123,420	118	$150,450					$622,298	Yes	61%
28	SW1874	Masonry Block on Type 836S Barrier	ES	2	$292,000	100	$104,800	116	$132,008	384	$494,208											$731,016	No	250%
30	SW1875	Masonry Block on Pile Cap	Private Prop	1	$146,000	120	$76,800															$76,800	Yes	53%
31	SW1890A +	Masonry Block on Type 836S Barrier	ES	65	$9,490,000			50	$56,900	50	$64,350	100	$141,400	1,350	$2,089,800							$4,175,910	Yes	44%
	SW1890B	Masonry Block on Type 836S Barrier	ES			26	$27,248					100	$141,400	1,069	$1,654,812									
32	SW1890A +	Masonry Block on Type 836S Barrier	ES	92	$13,432,000					100	$128,700	50	$70,700	1,450	$2,244,600							$4,761,972	Yes	35%
	SW1890C	Masonry Block on Type 836S Barrier	ES-R/W									30	$42,420	149	$230,652	1,210	$2,044,900							
33	SW1895	Masonry Block on Pile Cap	Private Prop	1	$146,000	64	$40,960															$40,960	Yes	28%
34	SW1899	Masonry Block on Pile Cap	Private Prop	1	$146,000	48	$30,720															$30,720	Yes	21%
36	SW1905	Masonry Block on Pile Cap	Private Prop	1	$146,000	23	$14,720	39	$29,211													$43,931	Yes	30%
37	SW1907	Masonry Block on Pile Cap	Private Prop	1	$146,000	62	$39,680	16	$11,984													$51,664	Yes	35%
39	SW1913	Masonry Block on Pile Cap	Private Prop	1	$146,000	155	$99,200	17	$12,733													$111,933	Yes	77%
40	SW1996A +	Masonry Block on Type 836S Barrier	ES	14	$2,044,000	98	$102,704			49	$63,063	49	$69,286	390	$603,720							$3,061,447	No	150%
	SW1996B	Masonry Block on Type 836S Barrier	ES									25	$35,350	1,413	$2,187,324									
41	SW1996B	Masonry Block on Type 836S Barrier	ES	13	$1,898,000					49	$63,063	81	$114,534	1,381	$2,137,788							$2,315,385	No	122%
42	SW1996C	Masonry Block on Pile Cap	R/W	9	$1,314,000									98	$109,956	197	$251,175	987	$1,347,255			$1,708,386	No	130%
43	SW2001 +	Masonry Block on Type 836S Barrier	ES	5	$730,000	256	$268,288															$1,070,143	No	147%
	SW2007A	Masonry Block on Type 836S Barrier	ES			50	$52,400	49	$55,762	539	$693,693													
44	SW2007A	Masonry Block on Type 836S Barrier	ES	5	$730,000			287	$326,606	401	$516,087											$842,693	No	115%
45	SW2007B	Masonry Block on Type 836S Barrier	R/W	5	$730,000									194	$300,312			399	$710,220			$1,010,532	No	138%
46	SW2007C	Masonry Block on Pile Cap	Private Prop	6	$876,000	144	$92,160	154	$115,346	340	$292,060											$499,566	Yes	57%

34 Total Number of Barriers

Number of barriers that pass Step 1B of the basic cost screening: 18

I-15 ELPSE NOISE BARRIER COST DEVELOPMENT & THREE-STEP SCREENING

Noise Barrier Cost Screening - Step 2

Includes Masonry Block Wall, Foundation Items, and Ancilary Costs. See Detailed Cost Estimates for Each Barrier.

Note:
This table includes a cost summary of the 18 barriers that passed the Step 1B cost reasonableness screening.

Base Cost Allowance per Benefitted Receptor: $146,000

			H=6	H=8	H=10	H=12	H=14	H=16	H=18	H=20	Total	Benefitted	Reasonable	Barrier Construction	Less than	% Over /
Barrier ID	Type	Location	Length	Length	Length	Length	Length	Length	Length	Length	Length	Receptors	Allowance	Cost	Allowance?	Under Allowance
SW1210	Masonry Block on Pile Cap	Private Prop		85	50						135	1	$146,000	$208,000	No	142%
SW1691	Masonry Block on Pile Cap	Private Prop	76								75	1	$146,000	$193,000	No	132%
SW1693	Masonry Block on Pile Cap	Private Prop	151								150	1	$146,000	$214,000	No	147%
SW1751B	Masonry Block on Pile Cap	Private Prop	88	26							113	1	$146,000	$238,000	No	163%
SW1789	Masonry Block on Spread Footing	Private Prop		164							164	1	$146,000	$326,000	No	223%
SW1823	Masonry Block on Pile Cap	Private Prop	25	26	14	273	405				743	10	$1,460,000	$1,797,000	No	123%
SW1831	Masonry Block on Pile Cap	Private Prop		52	347						399	3	$438,000	$615,000	No	140%
SW1833	Masonry Block on Pile Cap	Private Prop	14			192					205	2	$292,000	$559,000	No	191%
SW1839	Masonry Block on Pile Cap	Private Prop	250		44	152	110	118			674	7	$1,022,000	$1,320,000	No	129%
SW1875	Masonry Block on Pile Cap	Private Prop	120								120	1	$146,000	$279,000	No	191%
SW1890A +	Masonry Block on Type 836S Barrier	ES		50	50	100	1,350				1,550	65	$9,490,000	$5,333,000	Yes	56%
SW1890B	Masonry Block on Type 836S Barrier	ES	26			100	1,069				1,194					
SW1890A +	Masonry Block on Type 836S Barrier	ES			100	50	1,450				1,600	92	$13,432,000	$5,234,000	Yes	39%
SW1890C	Masonry Block on Type 836S Barrier	ES-R/W				30	149	1,210			1,388					
SW1895	Masonry Block on Pile Cap	Private Prop	64								63	1	$146,000	$269,000	No	184%
SW1899	Masonry Block on Pile Cap	Private Prop	48								48	1	$146,000	$419,000	No	287%
SW1905	Masonry Block on Pile Cap	Private Prop	23	39							61	1	$146,000	$295,000	No	202%
SW1907	Masonry Block on Pile Cap	Private Prop	62	16							78	1	$146,000	$350,000	No	240%
SW1913	Masonry Block on Pile Cap	Private Prop	155	17							172	1	$146,000	$1,025,000	No	702%
SW2007C	Masonry Block on Pile Cap	Private Prop	144	154	340						638	6	$876,000	$1,477,000	No	169%
18 Total Number of Barriers											**Number of barriers that pass the Step 2 detailed cost screening:**				**2**	

I-15 ELPSE SUMMARY OF NOISE BARRIER COST REASONABLENESS

Noise Barrier Cost Screening - Step 2 Cost Estimate Details

General Notes:

1. Unit prices obtained from Caltrans Cost Data website for projects awarded in recent years (2020 through 2023) in Districts 7, 8, and 12.
2. Since unit price data for 2023 was generally not available, the prices on the higher side are being used to account for the inflation that has taken place over the past year.
3. Estimated barrier costs are rounded up to the nearest one-thousand dollars.
4. Traffic control, minor items, etc. includes a rough estimate for utility investigations including notifying Dig Alert, permits, temporary signage, traffic or pedestrian barriers, and other traffic control measures to protect the work zone at the barrier construction zone.
5. Job site management varies depending on the length of the wall. It is assumed it would take up to 3 months to construct walls with lengths 500 ft or less, and 4 months for walls longer than 500 ft, which results in job site management costs calculated at $6,000 and $8,000 respectively.
6. Temporary construction easements (TCE) costs in private properties (rounded up to the nearest one thousand dollars) are calculated by:
    a) Determining the cost per square foot of the propety (land) using the highest of:
        1) The latest assessed property land value from the Riverside County Assessor, or
        2) A cost of $3.00 per SF based on cost data from the SR-91 Express Lanes Connector (ELC) Project recently constructed (EA 08-0F543).
    b) The TCE annual rent is then calculated at 9% of the cost per square foot. The monthly rent is determined by dividing it over 12 months.
    c) The square footage of TCE area required is multiplied by the monthly rent amount and by the number of months estimated for the entire project completion (37). This allows the contractor to build the walls at any time during project construction.
    d) Right-of-way support cost is 10% of TCE cost, and compensation for temporary loss of site improvements is estimated at $1,000 per property. Both are included in the total cost of TCE.
7. Cost of permanent easements (rounded up to the nearest one thousand dollars) are estimated multiplying the easement area (length x width) times the greater of:
    a) The latest assessed property land value from the Riverside County Assessor, or
    b) A cost of $20.00 per SF based on cost data from the SR-91 Express Lanes Connector (ELC) Project recently constructed (EA 08-0F543).
    c) Right-of-way support cost is 10% of easement cost and it is included in the total cost of the easement.
8. Masonry block area calculation is determined multiplying length times height and:
    a) Plus 6 inches of masonry block embeded into the ground for soundwalls on trench footing or on pile cap.
    b) Minus 3 ft when placed on top of Type 836S/SV concrete barrier.
9. The cost estimates include the construction items identified with the current information available. Additional items may be required during final design for any barriers recommended for construction.
10. Applicable base cost allowance per benefitted receptor at the time of cost estimate development: $146,000.00
    6.75% For Time-Related Overhead (TRO)(percent from contract items only, excludes right-of-way items)
    4.00% For Design Fee (percent from construction costs only, excludes right-of-way items)
    10.00% For Mobilization (percent from construction costs only, excludes right-of-way items)
11. A minimum of 2 geotechnical test borings are required per noise barrier location. Additional borings are required at an interval of 500 ft for barriers longer than 600 ft.

Unit Prices:

Item Code	Item Description	Unit	Unit Price
153247	Remove Concrete (Miscellaneous)(CY)	CY	$400.00
170105	Clearing and Grubbing (Acre)	Acre	$7,000.00
190101	Roadway Excavation	CY	$46.00
192001	Structure Excavation	CY	$155.00
193001	Structure Backfill	CY	$160.00
198010	Imported Borrow (CY)	CY	$49.00
202038	Packet Fertilizer	EA	$8.00
204038	Plant (Group U)	EA	$225.00
205035	Wood Mulch	CY	$365.00
260203	Class 2 Aggregate Base (CY)	CY	$190.00
390132	Hot Mix Asphalt (Type A)	TON	$335.00
390137	Rubberized Hot Mix Asphalt (Gap Graded)	TON	$280.00
398001	Remove Asphalt Concrete Pavement (SQFT)	SQFT	$14.00
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30, L = 16')	LF	$150.00
510060	Structural Concrete, Retaining Wall	CY	$1,680.00
510061	Structural Concrete, Soundwall (Pile Cap)	CY	$1,500.00
510094	Structural Concrete, Drainage Inlet	CY	$5,450.00
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72
520103	Bar Reinforcing Steel (Retaining Wall)	LB	$5.72
582001	Soundwall (Masonry Block)	SQFT	$45.00
582002	Access Gate (Sound Wall)	EA	$10,000.00
600051A	Remove Wall	LF	$150.00
650014	18" Reinforced Concrete Pipe	LF	$234.00
690117	18" Corrugated Steel Pipe Downdrain (.079" thick)	LF	$272.00
720110	Small-Rock Slope Protection	CY	$450.00
731502	Minor Concrete (Miscellaneous Construction)	CY	$2,200.00
750030	Inlet Frame and Grate	EA	$2,734.00
803020	Remove Fence	LF	$15.00
803110	Reconstruct Wood Fence	LF	$223.50
832006	Midwest Guardrail System (Steel Post)	LF	$65.00
832070	Vegetation Control (Minor Concrete)	SQYD	$200.00
839543	Transition Railing (Type WB-31)	EA	$5,600.00
839578	End Cap (Type TC)	EA	$500.00
839584	Alternative In-Line Terminal System	EA	$7,500.00
839741	Type 836S Barrier (Case 1)	LF	$240.00
839741	Type 836S Barrier (Case 2, He=3')	LF	$450.00
839745	Concrete Barrier Transition	LF	$2,735.00
839749	Concrete Barrier (Type 842 Modified)	LF	$300.00
839752	Remove Guardrail	LF	$12.00
210XXX	NPDES Erosion Control	LS	$5,000.00
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00
	Traffic Control, Minor items, etc.*	LS	$20,000.00
	Appraisal Fee (per property)	EA	$10,000.00
	Title Fee (per property)	EA	$650.00
	Inspection Fee (per property)	EA	$500.00

* Unit price shown is for work near freeway and ramps. Cost varies for work near local roads.

** Additional items whose unit price varies are included in the cost estimate details for each barrier.

7. BARRIER SW1210

Type: Masonry Block on Pile Cap (Case 1 per Caltrans Standard Plan B15-3)
Total Barrier length: 135 ft
Benefitted Receptors: 1
Total Cost Allowance: $146,000
Estimated Barrier Cost: $208,000
Cost Reasonable: **No**

Itemized Cost Estimate:

				Barrier Height	**8 ft**		**10 ft**		
				Length of Stepped Wall Segments	Segment 1, 3	Length 85 ft	Segment 2	Length 50 ft	**Cost**
Code	**Description**	**Unit**	**Unit Price**		**Quantity**	**Cost**	**Quantity**	**Cost**	**Subtotals**
090105	Time-Related Overhead (LS)	LS	$9,700.00		1	$9,700			$9,700
130100	Job Site Management	LS	$6,000.00		1	$6,000			$6,000
170103	Clearing and Grubbing (LS)	LS	$3,300.00		1	$3,300			$3,300
202038	Packet Fertilizer	EA	$8.00		15	$120			$120
204038	Plant (Group U)	EA	$225.00		3	$675			$675
204099	Plant Establishment Work	LS	$3,000.00		1	$3,000			$3,000
205035	Wood Mulch	CY	$365.00		0.6	$219			$219
206300	Temporary Irrigation System	LS	$1,500.00		1	$1,500			$1,500
498016	16" Dia CIDH Concrete Piling (Case 1, Φ = 30)	LF	$150.00		46	$6,923	31	$4,603	$11,527
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00		8.3	$12,396	4.9	$7,292	$19,688
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72		1,183	$6,766	696	$3,980	$10,747
582001	Soundwall (Masonry Block)	SQFT	$45.00		722	$32,512	525	$23,625	$56,138
803020	Remove Fence	LF	$15.00		85	$1,275	50	$750	$2,025
210XXX	NPDES Erosion Control	LS	$5,000.00		1	$5,000			$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00		2	$13,000			$13,000
	Traffic Control, Minor items, etc.	LS	$10,000.00		1	$10,000			$10,000
999990	Mobilization	LS	$16,000.00		1	$16,000			$16,000
	Permanent Footing Easement (2' wide)	LS	$6,000.00		1	$6,000			$6,000
	Temporary Construction Easement (145' long x 15' wide)	LS	$15,000.00		1	$15,000			$15,000
	Appraisal Fee (1 property)	EA	$10,000.00		1	$10,000			$10,000
	Title Fee (1 property)	EA	$650.00		1	$650			$650
	Inspection Fee (1 property)	EA	$500.00		1	$500			$500
	Design Fee	LS	$7,000.00		1	$7,000			$7,000
							Estimated Barrier Cost:		**$208,000**

18. BARRIER SW1691

Type: Masonry Block on Pile Cap (Case 2 per Caltrans Standard Plan B15-3)
Total Barrier length: 76 ft
Benefitted Receptors: 1
Total Cost Allowance: $146,000
Estimated Barrier Cost: $193,000
Cost Reasonable: **No**

Itemized Cost Estimate:

			Barrier Height	**6 ft**	
			Length	Segment	Length
				1	76 ft
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**
090105	Time-Related Overhead (LS)	LS	$8,400.00	1	$8,400
130100	Job Site Management	LS	$6,000.00	1	$6,000
170103	Clearing and Grubbing (LS)	LS	$200.00	1	$200
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30)	LF	$150.00	63	$9,413
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00	7.4	$11,083
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72	1,058	$6,050
582001	Soundwall (Masonry Block)	SQFT	$45.00	494	$22,230
210XXX	NPDES Erosion Control	LS	$10,000.00	1	$10,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	2	$13,000
	Traffic Control, Minor items, etc.	LS	$10,000.00	1	$10,000
	Landscaping Restoration	LS	$20,000.00	1	$20,000
	Minor Grading for Construction Vehicle Access	LS	$15,000.00	1	$15,000
999990	Mobilization	LS	$14,000.00	1	$14,000
	Permanent Footing Easement (2' wide)	LS	$4,000.00	1	$4,000
	Temporary Construction Easement (270' long x 15' wide)*	LS	$26,000.00	1	$26,000
	Appraisal Fee (1 property)	EA	$10,000.00	1	$10,000
	Title Fee (1 property)	EA	$650.00	1	$650
	Inspection Fee (1 property)	EA	$500.00	1	$500
	Design Fee	LS	$6,000.00	1	$6,000
				Estimated Barrier Cost:	**$193,000**

| | | | | **Estimated Barrier Cost:** | **$193,000** |

* Includes temporary closure/use of entire entrance to dog park area for construction vehicles & dril rig.

19. BARRIER SW1693

Type: Masonry Block on Pile Cap (Case 1 per Caltrans Standard Plan B15-3)
Total Barrier length: 150 ft
Benefitted Receptors: 1
Total Cost Allowance: $146,000
Estimated Barrier Cost: $214,000
Cost Reasonable: **No**

Itemized Cost Estimate:

			Barrier Height	**6 ft**	
			Length	Segment	Length
				1	150 ft
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**
090105	Time-Related Overhead (LS)	LS	$9,800.00	1	$9,800
130100	Job Site Management	LS	$6,000.00	1	$6,000
170103	Clearing and Grubbing (LS)	LS	$300.00	1	$300
498016	16" Dia CIDH Concrete Piling (Case 1, Φ = 30)	LF	$150.00	71	$10,697
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00	14.6	$21,875
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72	2,088	$11,941
582001	Soundwall (Masonry Block)	SQFT	$45.00	975	$43,875
803020	Remove Fence	LF	$15.00	150	$2,250
210XXX	NPDES Erosion Control	LS	$5,000.00	1	$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	2	$13,000
	Traffic Control, Minor items, etc.	LS	$10,000.00	1	$10,000
	Landscaping Restoration	LS	$20,000.00	1	$20,000
999990	Mobilization	LS	$16,000.00	1	$16,000
	Permanent Footing Easement (2' wide)	LS	$7,000.00	1	$7,000
	Temporary Construction Easement (175' long x 15' wide)*	LS	$18,000.00	1	$18,000
	Appraisal Fee (1 property)	EA	$10,000.00	1	$10,000
	Title Fee (1 property)	EA	$650.00	1	$650
	Inspection Fee (1 property)	EA	$500.00	1	$500
	Design Fee	LS	$7,000.00	1	$7,000
			Estimated Barrier Cost:		**$214,000**

* Includes temporary access from local street for construction vehicles & drill rig.

20. BARRIER SW1751B

Type: Masonry Block on Pile Cap (Case 2 per Caltrans Standard Plan B15-3)
Total Barrier length: 113 ft
Benefitted Receptors: 1
Total Cost Allowance: $146,000
Estimated Barrier Cost: $238,000
Cost Reasonable: **No**

Itemized Cost Estimate:

			Barrier Height	**6 ft**		**8 ft**		
			Length of Stepped Wall	Segment	Length	Segment	Length	
			Segments	1	87 ft	2	26 ft	**Cost**
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Subtotals**
090105	Time-Related Overhead (LS)	LS	$9,500.00	1	$9,500			$9,500
130100	Job Site Management	LS	$6,000.00	1	$6,000			$6,000
170103	Clearing and Grubbing (LS)	LS	$300.00	1	$300			$300
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30)	LF	$150.00	71	$10,704	26	$3,863	$14,567
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00	8.4	$12,629	2.6	$3,850	$16,479
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72	1,205	$6,894	367	$2,102	$8,995
582001	Soundwall (Masonry Block)	SQFT	$45.00	563	$25,331	224	$10,098	$35,429
731502	Minor Concrete (Miscellaneous Construction)	CY	$2,200.00	3.2	$7,056	1.0	$2,151	$9,207
803020	Remove Fence	LF	$15.00	87	$1,299	26	$396	$1,695
210XXX	NPDES Erosion Control	LS	$5,000.00	1	$5,000			$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	2	$13,000			$13,000
	Traffic Control, Minor items, etc.	LS	$10,000.00	1	$10,000			$10,000
	Grading around wall	LS	$5,000.00	1	$5,000			$5,000
	Landscaping Restoration	LS	$15,000.00	1	$15,000			$15,000
999990	Mobilization	LS	$16,000.00	1	$16,000			$16,000
	Permanent Footing Easement (2' wide)	LS	$7,000.00	1	$7,000			$7,000
	Temporary Construction Easement (5,420 SF)*	LS	$46,000.00	1	$46,000			$46,000
	Appraisal Fee (1 property)	EA	$10,000.00	1	$10,000			$10,000
	Title Fee (1 property)	EA	$650.00	1	$650			$650
	Inspection Fee (1 property)	EA	$500.00	1	$500			$500
	Design Fee	LS	$7,000.00	1	$7,000			$7,000
							Estimated Barrier Cost:	**$238,000**

* Includes access from the street, use of part of the drivethrough from limits of soundwall to drivethrough exit, and the outdoor playground area that would be closed during construction of the soundwall.
** Compensation for temporary loss of use of the outdoor playground area and the drivethrough of the restaurant has not been included. These are additional costs that would have to be determined and added.

22. BARRIER SW1789

Type: Masonry Block on Spread Footing (Case 2 per Caltrans Standard Plan B15-1)
Total Barrier length: 164 ft
Benefitted Receptors: 1
Total Cost Allowance: $146,000
Estimated Barrier Cost: $326,000
Cost Reasonable: **No**

Itemized Cost Estimate:

			Barrier Height	**8 ft**	
			Length	Segment	Length
				1	164 ft
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**
090105	Time-Related Overhead (LS)	LS	$15,400.00	1	$15,400
130100	Job Site Management	LS	$6,000.00	1	$6,000
170103	Clearing and Grubbing (LS)	LS	$7,400.00	1	$7,400
192001	Structure Excavation (7' wide x 2.2' deep)*	CY	$155.00	93.5	$14,499
193001	Structure Backfill (structure excavation minus footing structural concrete)	CY	$160.00	63.2	$10,107
202038	Packet Fertilizer	EA	$8.00	35	$280
204038	Plant (Group U)	EA	$225.00	7	$1,575
204099	Plant Establishment Work	LS	$4,000.00	1	$4,000
205035	Wood Mulch	CY	$365.00	1.4	$511
510061	Structural Concrete, Soundwall (5' wide Spread Footing)*	CY	$1,500.00	30.4	$45,556
520101	Bar Reinforcing Steel (Spread Footing, Case 2)*	LB	$5.72	2,145	$12,269
582001	Soundwall (Masonry Block)*	SQFT	$45.00	1,509	$67,896
600051A	Remove Wall	LF	$150.00	164	$24,600
210XXX	NPDES Erosion Control	LS	$5,000.00	1	$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	2	$13,000
	Traffic Control, Minor items, etc.	LS	$5,000.00	1	$5,000
	Landscaping Restoration	LS	$10,000.00	1	$10,000
999990	Mobilization	LS	$25,000.00	1	$25,000
	Permanent Footing Easement (5' wide)*	LS	$19,000.00	1	$19,000
	Temporary Construction Easement (2,590 SF)**	LS	$17,000.00	1	$17,000
	Appraisal Fee (1 property)	EA	$10,000.00	1	$10,000
	Title Fee (1 property)	EA	$650.00	1	$650
	Inspection Fee (1 property)	EA	$500.00	1	$500
	Design Fee	LS	$10,000.00	1	$10,000
			Estimated Barrier Cost:		**$326,000**

* Due to proximity of slope on one side of the soundwall the case 2 spread footing has to be buried lower to provide minimum cover over the footing and the overall wall height increases by approximately 8 inches which requires using the footing width of a 10' high wall.
** Includes access from the street to the soundwall location, east portion of the driveway, the landscaped area along the soundwall, and the pool area which may require maintenance/cleaning during construction.

23. BARRIER SW1823

Type: Masonry Block on Pile Cap (Case 2 per Caltrans Standard Plan B15-3)
Total Barrier length: 743 ft
Benefitted Receptors: 10
Total Cost Allowance: $1,460,000
Estimated Barrier Cost: $1,797,000
Cost Reasonable: **No**

Itemized Cost Estimate:

				Barrier Height	6 ft		8 ft		10 ft		12 ft		14 ft		
				Length of Stepped Wall Segments	Segment 1	Length 25 ft	Segment 5	Length 26 ft	Segment 4	Length 14 ft	Segment 2	Length 273 ft	Segment 3	Length 405 ft	
Code	**Description**	**Unit**	**Unit Price**		**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Cost Subtotals**
090105	Time-Related Overhead (LS)	LS	$84,900.00		1	$84,900									$84,900
130100	Job Site Management	LS	$8,000.00		1	$8,000									$8,000
170103	Clearing and Grubbing (LS)	LS	$16,500.00		1	$16,500									$16,500
190101	Roadway Excavation (temporary bench removal)	CY	$46.00		45.8	$2,108	46.9	$2,159	25.9	$1,189	500.7	$23,031	743.2	$34,189	$62,677
198010	Imported Borrow (temporary bench for CIDH pile rig installation access)	CY	$49.00		45.8	$2,246	46.9	$2,300	25.9	$1,267	500.7	$24,533	743.2	$36,418	$66,764
202038	Packet Fertilizer	EA	$8.00		75	$600									$600
204038	Plant (Group U)	EA	$225.00		15	$3,375									$3,375
204099	Plant Establishment Work	LS	$40,000.00		1	$40,000									$40,000
205035	Wood Mulch	CY	$365.00		3.0	$1,095									$1,095
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30)	LF	$150.00		21	$3,197	25	$3,750	16	$2,406	365	$54,770	650	$97,446	$161,569
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00		2	$3,646	2	$3,733	1	$2,056	27	$39,827	39	$59,121	$108,383
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72		348	$1,990	356	$2,038	197	$1,128	3,899	$22,302	5,904	$33,772	$61,230
582001	Soundwall (Masonry Block)	SQFT	$45.00		163	$7,313	218	$9,792	148	$6,662	3,414	$153,619	5,878	$264,524	$441,909
600051A	Remove Wall	LF	$150.00		25	$3,750	26	$3,840	14	$2,115	273	$40,965	405	$60,810	$111,480
731502	Minor Concrete (Miscellaneous Construction)(backyard concrete pads, sidewalk repairs)	CY	$2,200.00		14.6	$32,099									$32,099
210XXX	NPDES Erosion Control	LS	$10,000.00		1	$10,000									$10,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00		3	$19,500									$19,500
	Traffic Control, Minor items, etc.	LS	$20,000.00		1	$20,000									$20,000
	Remove Pilasters	EA	$1,000.00		6	$6,000									$6,000
	Small Storage Shed Replacement	EA	$3,000.00		2	$6,000									$6,000
	Landscaping Restoration	LS	$80,000.00		1	$80,000									$80,000
999990	Mobilization	LS	$135,000.00		1	$135,000									$135,000
	Permanent Footing Easement (2' wide)	LS	$34,000.00		1	$34,000									$34,000
	Temporary Construction Easement (19,777 SF)*	LS	$109,000.00		1	$109,000									$109,000
	Appraisal Fee (11 properties)	EA	$10,000.00		11	$110,000									$110,000
	Title Fee (11 properties)	EA	$650.00		11	$7,150									$7,150
	Inspection Fee (11 properties)	EA	$500.00		11	$5,500									$5,500
	Design Fee	LS	$54,000.00		1	$54,000									$54,000
														Estimated Barrier Cost:	**$1,797,000**

* Includes 5' from the backyard of each private property plus the entire landscaped area on the street side for drill rig access/operations.

24. BARRIER SW1831

Type: Masonry Block on Pile Cap (Case 2 per Caltrans Standard Plan B15-3)
Total Barrier length: 399 ft
Benefitted Receptors: 3
Total Cost Allowance: $438,000
Estimated Barrier Cost: $615,000
Cost Reasonable: **No**

Itemized Cost Estimate:

			Barrier Height	**8 ft**		**10 ft**		
			Length of Stepped Wall	Segment	Length	Segment	Length	
			Segments	1	52 ft	2	347 ft	**Cost**
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Subtotals**
090105	Time-Related Overhead (LS)	LS	$30,300.00	1	$30,300			$30,300
130100	Job Site Management	LS	$6,000.00	1	$6,000			$6,000
170103	Clearing and Grubbing (LS)	LS	$3,800.00	1	$3,800			$3,800
202038	Packet Fertilizer	EA	$8.00	45	$360			$360
204038	Plant (Group U)	EA	$225.00	9	$2,025			$2,025
204099	Plant Establishment Work	LS	$25,000.00	1	$25,000			$25,000
205035	Wood Mulch	CY	$365.00	1.8	$657			$657
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30)	LF	$150.00	50	$7,463	371	$55,670	$63,133
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00	5	$7,583	34	$50,604	$58,188
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72	724	$4,139	4,854	$27,765	$31,905
582001	Soundwall (Masonry Block)	SQFT	$45.00	442	$19,890	3,644	$163,958	$183,848
803020	Remove Fence	LF	$15.00	52	$780	347	$5,205	$5,985
210XXX	NPDES Erosion Control	LS	$5,000.00	1	$5,000			$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	2	$13,000			$13,000
	Traffic Control, Minor items, etc.	LS	$10,000.00	1	$10,000			$10,000
	Remove Pilasters	EA	$1,000.00	9	$9,000			$9,000
	Landscaping Restoration	LS	$30,000.00	1	$30,000			$30,000
999990	Mobilization	LS	$48,000.00	1	$48,000			$48,000
	Permanent Footing Easement (2' wide)	LS	$18,000.00	1	$18,000			$18,000
	Temporary Construction Easement (15' wide)*	LS	$39,000.00	1	$39,000			$39,000
	Appraisal Fee (1 property)	EA	$10,000.00	1	$10,000			$10,000
	Title Fee (1 property)	EA	$650.00	1	$650			$650
	Inspection Fee (1 property)	EA	$500.00	1	$500			$500
	Design Fee	LS	$20,000.00	1	$20,000			$20,000
						Estimated Barrier Cost:		**$615,000**

* Includes temporary access from local street on the side next to the channel for construction vehicle & drill rig.

25. BARRIER SW1833

Type: Masonry Block on Pile Cap (Case 2 per Caltrans Standard Plan B15-3)
Total Barrier length: 205 ft
Benefitted Receptors: 2
Total Cost Allowance: $292,000
Estimated Barrier Cost: $559,000
Cost Reasonable: **No**

Itemized Cost Estimate:

			Barrier Height	**6 ft**		**12 ft**		
			Length of Stepped Wall Segments	Segment 2	Length 14 ft	Segment 1	Length 191 ft	
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Cost Subtotals**
090105	Time-Related Overhead (LS)	LS	$27,100.00	1	$27,100			$27,100
130100	Job Site Management	LS	$6,000.00	1	$6,000			$6,000
170103	Clearing and Grubbing (LS)	LS	$10,400.00	1	$10,400			$10,400
190101	Roadway Excavation (temporary bench removal)	CY	$46.00	262.593	$12,079			$12,079
198010	Imported Borrow (temporary bench for CIDH pile rig installation access)	CY	$49.00	262.6	$12,867			$12,867
202038	Packet Fertilizer	EA	$8.00	50	$400			$400
204038	Plant (Group U)	EA	$225.00	10	$2,250			$2,250
204099	Plant Establishment Work	LS	$20,000.00	1	$20,000			$20,000
205035	Wood Mulch	CY	$365.00	2.0	$730			$730
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30)	LF	$150.00	12	$1,856	256	$38,350	$40,206
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00	1	$2,042	19	$27,854	$29,896
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72	195	$1,114	2,727	$15,597	$16,712
582001	Soundwall (Masonry Block)	SQFT	$45.00	91	$4,095	2,388	$107,438	$111,533
600051A	Remove Wall	LF	$150.00	14	$2,100	191	$28,650	$30,750
731502	Minor Concrete (Miscellaneous Construction)(backyard concrete pads, sidewalk repairs)	CY	$2,200.00	11.1	$24,420			$24,420
803020	Remove Fence	LF	$15.00	110	$1,650			$1,650
803110	Reconstruct Wood Fence	LF	$223.50	110	$24,585			$24,585
210XXX	NPDES Erosion Control	LS	$5,000.00	1	$5,000			$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	2	$13,000			$13,000
	Traffic Control, Minor items, etc.	LS	$10,000.00	1	$10,000			$10,000
	Remove Pilasters	EA	$1,000.00	3	$3,000			$3,000
	Small Storage Shed Replacement	EA	$5,000.00	1	$5,000			$5,000
	Landscaping Restoration	LS	$20,000.00	1	$20,000			$20,000
999990	Mobilization	LS	$43,000.00	1	$43,000			$43,000
	Permanent Footing Easement (2' wide)	LS	$12,000.00	1	$12,000			$12,000
	Temporary Construction Easement (5,100' SF)*	LS	$24,000.00	1	$24,000			$24,000
	Appraisal Fee (3 properties)	EA	$10,000.00	3	$30,000			$30,000
	Title Fee (3 properties)	EA	$650.00	3	$1,950			$1,950
	Inspection Fee (3 properties)	EA	$500.00	3	$1,500			$1,500
	Design Fee	LS	$18,000.00	1	$18,000			$18,000
							Estimated Barrier Cost:	**$559,000**

* Includes 5' inside private properties, assumes construction vehicle and drill rig access/operations from Knabe Road and the maintenance road next to channel.

26. BARRIER SW1839

Type: Masonry Block on Pile Cap (Case 2 per Caltrans Standard Plan B15-3)
Total Barrier length: 674 ft
Benefitted Receptors: 7
Total Cost Allowance: $1,022,000
Estimated Barrier Cost: $1,320,000
Cost Reasonable: **No**

Itemized Cost Estimate:

			Barrier Height	**6 ft**		**10 ft**		**12 ft**		**14 ft**		**16 ft**		
			Length of Stepped Wall	Segment	Length	Segment	Length	Segment	Length	Segment	Length	Segment	Length	
			Segments	4	250 ft	6	44 ft	3, 5	152 ft	1	110 ft	2	118 ft	**Cost**
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Subtotals**
090105	Time-Related Overhead (LS)	LS	$67,000.00	1	$67,000									$67,000
130100	Job Site Management	LS	$8,000.00	1	$8,000									$8,000
170103	Clearing and Grubbing (LS)	LS	$29,300.00	1	$29,300									$29,300
202038	Packet Fertilizer	EA	$8.00	140	$1,120									$1,120
204038	Plant (Group U)	EA	$225.00	28	$6,300									$6,300
204099	Plant Establishment Work	LS	$30,000.00	1	$30,000									$30,000
205035	Wood Mulch	CY	$365.00	5.6	$2,044									$2,044
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30)	LF	$150.00	204	$30,619	48	$7,190	204	$30,550	177	$26,550	237	$35,550	$130,459
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00	24.3	$36,458	4	$6,417	15	$22,167	11	$16,042	11	$17,208	$98,292
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72	3,479	$19,901	616	$3,521	2,170	$12,412	1,602	$9,164	1,769	$10,121	$55,119
582001	Soundwall (Masonry Block)	SQFT	$45.00	1,625	$73,125	462	$20,790	1,900	$85,500	1,595	$71,775	1,947	$87,615	$338,805
600051A	Remove Wall	LF	$150.00	250	$37,500	44	$6,600	152	$22,800	110	$16,500	118	$17,700	$101,100
731502	Minor Concrete (Miscellaneous Construction)(backyard concrete pads, sidewalk repairs)	CY	$2,200.00	25.9	$56,899									$56,899
210XXX	NPDES Erosion Control	LS	$10,000.00	1	$10,000									$10,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	3	$19,500									$19,500
	Traffic Control, Minor items, etc.	LS	$20,000.00	1	$20,000									$20,000
	Remove Pilasters	EA	$1,000.00	10	$10,000									$10,000
	Landscaping Restoration	LS	$75,000.00	1	$75,000									$75,000
999990	Mobilization	LS	$106,000.00	1	$106,000									$106,000
	Permanent Footing Easement (2' wide)	LS	$30,000.00	1	$30,000									$30,000
	Temporary Construction Easement (5' wide)*	LS	$26,000.00	1	$26,000									$26,000
	Appraisal Fee (5 properties)	EA	$10,000.00	5	$50,000									$50,000
	Title Fee (5 properties)	EA	$650.00	5	$3,250									$3,250
	Inspection Fee (5 properties)	EA	$500.00	5	$2,500									$2,500
	Design Fee	LS	$43,000.00	1	$43,000									$43,000
													Estimated Barrier Cost:	**$1,320,000**

* Includes 5' inside private properties, assumes construction vehicle and drill rig access/operations from Knabe Road.

30. BARRIER SW1875

Type: Masonry Block on Pile Cap (Case 1 per Caltrans Standard Plan B15-3)
Total Barrier length: 120 ft
Benefitted Receptors: 1
Total Cost Allowance: $146,000
Estimated Barrier Cost: $279,000
Cost Reasonable: **No**

Itemized Cost Estimate:

			Barrier Height	**6 ft**	
			Length	Segment	Length
				1	120 ft
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**
090105	Time-Related Overhead (LS)	LS	$9,800.00	1	$9,800
130100	Job Site Management	LS	$6,000.00	1	$6,000
153247	Remove Concrete (Miscellaneous)(CY)	CY	$400.00	7.40	$2,960
170103	Clearing and Grubbing (LS)	LS	$3,300.00	1	$3,300
202038	Packet Fertilizer	EA	$8.00	15	$120
204038	Plant (Group U)	EA	$225.00	3	$675
204099	Plant Establishment Work	LS	$4,000.00	1	$4,000
205035	Wood Mulch	CY	$365.00	0.6	$219
498016	16" Dia CIDH Concrete Piling (Case 1, Φ = 30)	LF	$150.00	57	$8,588
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00	12	$17,500
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72	1,670	$9,553
582001	Soundwall (Masonry Block)	SQFT	$45.00	780	$35,100
731502	Minor Concrete (Miscellaneous Construction)	CY	$2,200.00	7.4	$16,280
803020	Remove Handrail	LF	$15.00	120	$1,800
210XXX	NPDES Erosion Control	LS	$5,000.00	1	$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	2	$13,000
	Traffic Control, Minor items, etc.	LS	$10,000.00	1	$10,000
	Landscaping Restoration	LS	$10,000.00	1	$10,000
999990	Mobilization	LS	$16,000.00	1	$16,000
	Permanent Footing Easement (2' wide)	LS	$6,000.00	1	$6,000
	Temporary Construction Easement (13,150 SF)*	LS	$84,000.00	1	$84,000
	Appraisal Fee (1 property)	EA	$10,000.00	1	$10,000
	Title Fee (1 property)	EA	$650.00	1	$650
	Inspection Fee (1 property)	EA	$500.00	1	$500
	Design Fee	LS	$7,000.00	1	$7,000
			Estimated Barrier Cost:		**$279,000**

* Includes portion of private driveway entrance for construction vehicle & drill rig access.

31. BARRIERS SW1890A + SW1890B COMBINATION

Type: (SW1890A) Masonry Block on Type 836S Barrier (Case 2 per Caltrans Standard Plan B15-6)
(SW1890B) Masonry Block on Type 836S Barrier (Case 2 per Caltrans Standard Plan B15-6)
Barrier length: 1550 ft SW1890A
1194 ft SW1890B
Benefitted Receptors: 65
Total Cost Allowance: $9,490,000
Estimated Barrier Cost: $5,333,000
Cost Reasonable: **Yes**

Itemized Cost Estimate:

				Barrier Height	8 ft		10 ft		12 ft		14 ft		
				Length of Stepped Wall	Segment	Length	Segment	Length	Segment	Length	Segment	Length	
Barrier SW1890A				Segments	1	50 ft	5	50 ft	2, 4	100 ft	3	1350 ft	**Cost**
Code	**Description**	**Unit**	**Unit Price**		**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Subtotals**
090105	Time-Related Overhead (LS)	LS	$178,500.00		1	$178,500							$178,500
130100	Job Site Management	LS	$8,000.00		1	$8,000							$8,000
170103	Clearing and Grubbing (LS)	LS	$3,000.00		1	$3,000							$3,000
192001	Structure Excavation (3.6' wide x 3' deep)	CY	$155.00		20	$3,100	20	$3,100	40	$6,200	540	$83,700	$96,100
193001	Structure Backfill (2' wide x 3' deep)	CY	$160.00		11	$1,778	11	$1,778	22	$3,556	300	$48,000	$55,111
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30, L = 16')	LF	$150.00		129	$19,350	149	$22,304	321	$48,150	4,714	$707,059	$796,863
510053	Structural Concrete, Bridge**	CY	$3,133.00								26	$81,458	$81,458
510054	Structural Concrete, Bridge (Polymer Fiber)**	CY	$2,850.00								15	$42,750	$42,750
510087	Structural Concrete, Approach Slab (Type R)**	CY	$2,140.00								6	$12,840	$12,840
510081	Aggregate Base (Approach Slab)**	CY	$420.00								1	$420	$420
510094	Structural Concrete, Drainage Inlet	CY	$5,450.00								3.2	$17,440	$17,440
511106	Drill and Bond Dowel**	LF	$50.00								602	$30,100	$30,100
519081	Joint Seal (MR 1/2")**	LF	$140.00								6	$840	$840
520102	Bar Reinforcing Steel (Bridge)**	LB	$5.00								15,100	$75,500	$75,500
582001	Soundwall (Masonry Block)	SQFT	$45.00		250	$11,250	350	$15,750	900	$40,500	14,850	$668,250	$735,750
600041	Furnish Polyester Concrete Overlay**	CF	$140.00								43	$6,020	$6,020
600041	Place Polyester Concrete Overlay**	CF	$115.00								225	$25,875	$25,875
600114	Bridge Removal (Portion)**	LS	$7,500.00								1	$7,500	$7,500
650014	18" Reinforced Concrete Pipe	LF	$234.00								480	$112,320	$112,320
690117	18" Corrugated Steel Pipe Downdrain (.079" thick)	LF	$272.00								98	$26,656	$26,656
720110	Small-Rock Slope Protection	CY	$450.00								0.46	$208	$208
750030	Inlet Frame and Grate	EA	$2,734.00								2	$5,468	$5,468
832006	Midwest Guardrail System (Steel Post)	LF	$65.00		90	$5,850							$5,850
832070	Vegetation Control (Minor Concrete)	SQYD	$200.00		50	$10,000							$10,000
839543	Transition Railing (Type WB-31)	EA	$5,600.00		1	$5,600							$5,600
839578	End Cap (Type TC)	EA	$500.00		1	$500							$500
839584	Alternative In-Line Terminal System	EA	$7,500.00		1	$7,500							$7,500
839741	Type 836S Barrier (Case 2, He=3')*	LF	$450.00		50	$22,500			50	$22,500	639	$287,550	$332,550
839745	Concrete Barrier Transition	LF	$2,735.00		15	$41,025							$41,025
839749	Concrete Barrier (Type 842 Modified)**	LF	$300.00								161	$48,300	$48,300
839752	Remove Guardrail	LF	$12.00		100	$1,200							$1,200
210XXX	NPDES Erosion Control	LS	$5,000.00		1	$5,000							$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00		4	$26,000							$26,000
	Traffic Control, Minor items, etc.	LS	$20,000.00		1	$20,000							$20,000
999990	Mobilization	LS	$283,000.00		1	$283,000							$283,000
	Design Fee	LS	$113,000.00		1	$113,000							$113,000
											Estimated Barrier Cost:		**$3,219,000**

* Excludes the concrete barrier (161') for the segment of soundwall on bridge structure and the segment on top of a new retaining wall (650') proposed by the project, because the cost of the concrete barrier is already included in the cost for the retaining wall.
** Items related to the bridge widening/modification needed to build the soundwall on the existing bridge structure.

			Barrier Height	6 ft		12 ft		14 ft		
			Length of Stepped Wall Segments	Segment 3	Length 27 ft	Segment 2	Length 100 ft	Segment 1	Length 1068 ft	Cost
Barrier SW1890B										
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Subtotals**
090105	Time-Related Overhead (LS)	LS	$117,200.00	1	$117,200					$117,200
130100	Job Site Management	LS	$8,000.00	1	$8,000					$8,000
170103	Clearing and Grubbing (LS)	LS	$3,400.00	1	$3,400					$3,400
192001	Structure Excavation (3.6' wide x 3' deep)	CY	$155.00	11	$1,674	40	$6,200	427	$66,216	$74,090
193001	Structure Backfill (2' wide x 3' deep)	CY	$160.00	6	$960	22	$3,556	237	$37,973	$42,489
202038	Packet Fertilizer	EA	$8.00					15	$120	$120
204038	Plant (Group U)	EA	$225.00					3	$675	$675
204099	Plant Establishment Work	LS	$10,000.00					1	$10,000	$10,000
205035	Wood Mulch	CY	$365.00					0.6	$219	$219
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30, L = 16')	LF	$150.00	70	$10,518	321	$48,150	3,729	$559,394	$618,062
510094	Structural Concrete, Drainage Inlet	CY	$5,450.00					3.2	$17,440	$17,440
582001	Soundwall (Masonry Block)	SQFT	$45.00	81	$3,645	900	$40,500	11,748	$528,660	$572,805
582002	Access Gate (Sound Wall)	EA	$10,000.00	1	$10,000					$10,000
650014	18" Reinforced Concrete Pipe	LF	$234.00					45	$10,530	$10,530
690117	18" Corrugated Steel Pipe Downdrain (.079" thick)	LF	$272.00					83	$22,576	$22,576
720110	Small-Rock Slope Protection	CY	$450.00					0.93	$417	$417
750030	Inlet Frame and Grate	EA	$2,734.00					2	$5,468	$5,468
839601A	Crash Cushion (QuadGuard M10)	EA	$25,000.00					1	$25,000	$25,000
839741	Type 836S Barrier (Case 1)*	LF	$240.00	27	$6,480	100	$24,000	665	$159,600	$190,080
839745	Concrete Barrier Transition	LF	$2,735.00					5	$13,675	$13,675
839752	Remove Guardrail	LF	$12.00					103	$1,236	$1,236
210XXX	NPDES Erosion Control	LS	$5,000.00					1	$5,000	$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	3	$19,500					$19,500
	Traffic Control, Minor items, etc.	LS	$20,000.00					1	$20,000	$20,000
	Plant Establishment	LS	$15,000.00					1	$15,000	$15,000
	Relocate Ramp Light Pole	LS	$20,000.00					1	$20,000	$20,000
	Relocate Ramp Metering Poles	LS	$30,000.00					1	$30,000	$30,000
999990	Mobilization	LS	$186,000.00	1	$186,000					$186,000
	Design Fee	LS	$75,000.00	1	$75,000					$75,000
									Estimated Barrier Cost:	**$2,114,000**

* Excludes the concrete barrier (402') for the segment of soundwall on top of a new retaining wall proposed by the project, because the cost of the concrete barrier is already included in the cost for the retaining wall.

32. BARRIERS SW1890A + SW1890C COMBINATION

Type: (SW1890A) Masonry Block on Type 836S Barrier (Case 2 per Caltrans Standard Plan B15-6)
(SW1890C) Masonry Block on Type 836S Barrier (Case 2) within CRZ, and on Pile Cap (Case 2) along R/W.
Barrier length: 1600 ft SW1890A
1388 ft SW1890C
Benefitted Receptors: 92
Total Cost Allowance: $13,432,000
Estimated Barrier Cost: $5,234,000
Cost Reasonable: **Yes**

Itemized Cost Estimate:

				Barrier Height	10 ft		12 ft		14 ft		
				Length of Stepped Wall	Segment	Length	Segment	Length	Segment	Length	
Barrier SW1890A				Segments	1	100 ft	2	50 ft	3	1450 ft	Cost
Code	**Description**	**Unit**	**Unit Price**		**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Subtotals**
090105	Time-Related Overhead (LS)	LS	$184,700.00		1	$184,700					$184,700
130100	Job Site Management	LS	$8,000.00		1	$8,000					$8,000
170103	Clearing and Grubbing (LS)	LS	$3,100.00		1	$3,100					$3,100
192001	Structure Excavation (3.6' wide x 3' deep)	CY	$155.00		40	$6,200	20	$3,100	580	$89,900	$99,200
193001	Structure Backfill (2' wide x 3' deep)	CY	$160.00		22	$3,556	11	$1,778	322	$51,556	$56,889
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30, L = 16')	LF	$150.00		296	$44,458	161	$24,150	5,063	$759,423	$828,030
510053	Structural Concrete, Bridge**	CY	$3,133.00						26	$81,458	$81,458
510054	Structural Concrete, Bridge (Polymer Fiber)**	CY	$2,850.00						15	$42,750	$42,750
510087	Structural Concrete, Approach Slab (Type R)**	CY	$2,140.00						6	$12,840	$12,840
510081	Aggregate Base (Approach Slab)**	CY	$420.00						1	$420	$420
510094	Structural Concrete, Drainage Inlet	CY	$5,450.00						3.2	$17,440	$17,440
511106	Drill and Bond Dowel**	LF	$50.00						602	$30,100	$30,100
519081	Joint Seal (MR 1/2")**	LF	$140.00						6	$840	$840
520102	Bar Reinforcing Steel (Bridge)**	LB	$5.00						15,100	$75,500	$75,500
582001	Soundwall (Masonry Block)	SQFT	$45.00		700	$31,500	450	$20,250	15,950	$717,750	$769,500
600041	Furnish Polyester Concrete Overlay**	CF	$140.00						43	$6,020	$6,020
600041	Place Polyester Concrete Overlay**	CF	$115.00						225	$25,875	$25,875
600114	Bridge Removal (Portion)**	LS	$7,500.00						1	$7,500	$7,500
650014	18" Reinforced Concrete Pipe	LF	$234.00						480	$112,320	$112,320
690117	18" Corrugated Steel Pipe Downdrain (.079" thick)	LF	$272.00						98	$26,656	$26,656
720110	Small-Rock Slope Protection	CY	$450.00						0.46	$208	$208
750030	Inlet Frame and Grate	EA	$2,734.00						2	$5,468	$5,468
832006	Midwest Guardrail System (Steel Post)	LF	$65.00		90	$5,850					$5,850
832070	Vegetation Control (Minor Concrete)	SQYD	$200.00		50	$10,000					$10,000
839543	Transition Railing (Type WB-31)	EA	$5,600.00		1	$5,600					$5,600
839578	End Cap (Type TC)	EA	$500.00		1	$500					$500
839584	Alternative In-Line Terminal System	EA	$7,500.00		1	$7,500					$7,500
839741	Type 836S Barrier (Case 2, He=3')*	LF	$450.00		100	$45,000	50	$22,500	639	$287,550	$355,050
839745	Concrete Barrier Transition	LF	$2,735.00		15	$41,025					$41,025
839749	Concrete Barrier (Type 842 Modified)**	LF	$300.00						161	$48,300	$48,300
839752	Remove Guardrail	LF	$12.00		100	$1,200					$1,200
210XXX	NPDES Erosion Control	LS	$5,000.00		1	$5,000					$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00		4	$26,000					$26,000
	Traffic Control, Minor items, etc.	LS	$20,000.00		1	$20,000					$20,000
999990	Mobilization	LS	$293,000.00		1	$293,000					$293,000
	Design Fee	LS	$117,000.00		1	$117,000					$117,000
									Estimated Barrier Cost:		**$3,331,000**

* Excludes the concrete barrier (161') for the segment soundwall on bridge structure and the segment on top of a new retaining wall (650') proposed by the project, because the cost of the concrete barrier is already included in the cost for the retaining wall.
** Items related to the bridge widening/modification needed to build the soundwall on the existing bridge structure.

		Barrier Height		12 ft		14 ft		16 ft		
		Stepped Wall Segments		Segment	Length	Segment	Length	Segment	Length	
		On Pile Cap		3	30 ft	2	149 ft	1	759 ft	
Barrier SW1890C		On Type 836S Barrier						1	80 ft	**Cost**
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Subtotals**
090105	Time-Related Overhead (LS)	LS	$105,500.00	1	$105,500					$105,500
130100	Job Site Management	LS	$8,000.00	1	$8,000					$8,000
170103	Clearing and Grubbing (LS)	LS	$5,700.00	1	$5,700					$5,700
194001	Ditch Excavation	CY	$484.00					10	$4,840	$4,840
202038	Packet Fertilizer	EA	$8.00					45	$360	$360
204038	Plant (Group U)	EA	$225.00					9	$2,025	$2,025
204099	Plant Establishment Work	LS	$20,000.00					1	$20,000	$20,000
205035	Wood Mulch	CY	$365.00					1.8	$657	$657
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30)(for pile cap)	LF	$150.00	41	$6,150	239	$35,910	1,519	$227,850	$269,910
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00	2.9	$4,375	14.5	$21,729	73.8	$110,688	$136,792
510094	Structural Concrete, Drainage Inlet	CY	$5,450.00					1.6	$8,720	$8,720
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72	428	$2,450	2,170	$12,413	11,382	$65,102	$79,965
192001	Structure Excavation - for Concrete Barrier (3.6' wide x 3' deep)	CY	$155.00					32.0	$4,960	$4,960
193001	Structure Backfill - for Concrete Barrier (2' wide x 3' deep)	CY	$160.00					17.8	$2,844	$2,844
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30, L = 16')(for concrete barrier)	LF	$150.00					308	$46,230	$46,230
582001	Soundwall (Masonry Block)	SQFT	$45.00	270	$12,150	1,639	$73,755	15,717	$707,265	$793,170
582002	Access Gate (Sound Wall)	EA	$10,000.00	1	$10,000					$10,000
690117	18" Corrugated Steel Pipe Downdrain (.079" thick)	LF	$272.00					83	$22,576	$22,576
720110	Small-Rock Slope Protection	CY	$450.00					0.46	$208	$208
721420	Concrete (Ditch Lining)	CY	$1,400.00					9	$12,600	$12,600
750030	Inlet Frame and Grate	EA	$2,734.00					1	$2,734	$2,734
839741	Type 836S Barrier (Case 2, He=3')*	LF	$450.00					80	$36,000	$36,000
210XXX	NPDES Erosion Control	LS	$5,000.00					1	$5,000	$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	3	$19,500					$19,500
	Traffic Control, Minor items, etc.	LS	$20,000.00					1	$20,000	$20,000
	Relocate Ramp Light Pole	LS	$20,000.00					1	$20,000	$20,000
	Relocate Ramp Metering Poles	LS	$30,000.00					1	$30,000	$30,000
999990	Mobilization	LS	$167,000.00	1	$167,000					$167,000
	Design Fee	LS	$67,000.00	1	$67,000					$67,000
								Estimated Barrier Cost:		**$1,903,000**

* Excludes the concrete barrier (370') for the segment of soundwall on top of a new retaining wall proposed by the project, because the cost of the concrete barrier is already included in the cost for the retaining wall.

33. BARRIER SW1895

Type: Masonry Block on Pile Cap (Case 2 per Caltrans Standard Plan B15-3)
Total Barrier length: 63 ft
Benefitted Receptors: 1
Total Cost Allowance: $146,000
Estimated Barrier Cost: $269,000
Cost Reasonable: **No**

Itemized Cost Estimate:

			Barrier Height	**6 ft**	
			Length	Segment	Length
				1	63 ft
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**
090105	Time-Related Overhead (LS)	LS	$5,800.00	1	$5,800
130100	Job Site Management	LS	$6,000.00	1	$6,000
170103	Clearing and Grubbing (LS)	LS	$200.00	1	$200
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30)	LF	$150.00	52	$7,828
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00	6.1	$9,188
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72	877	$5,015
582001	Soundwall (Masonry Block)	SQFT	$45.00	410	$18,428
210XXX	NPDES Erosion Control	LS	$5,000.00	1	$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	2	$13,000
	Traffic Control, Minor items, etc.	LS	$10,000.00	1	$10,000
	Landscaping Restoration	LS	$10,000.00	1	$10,000
999990	Mobilization	LS	$10,000.00	1	$10,000
	Permanent Footing Easement (2' wide)	LS	$3,000.00	1	$3,000
	Temporary Construction Easement (24,240 SF)*	LS	$150,000.00	1	$150,000
	Appraisal Fee (1 property)	EA	$10,000.00	1	$10,000
	Title Fee (1 property)	EA	$650.00	1	$650
	Inspection Fee (1 property)	EA	$500.00	1	$500
	Design Fee	LS	$4,000.00	1	$4,000
			Estimated Barrier Cost:		**$269,000**

* Includes temporary access from nearest public street through private road for construction vehicle & drill rig.

34. BARRIER SW1899

Type: Masonry Block on Pile Cap (Case 2 per Caltrans Standard Plan B15-3)
Total Barrier length: 48 ft
Benefitted Receptors: 1
Total Cost Allowance: $146,000
Estimated Barrier Cost: $419,000
Cost Reasonable: **No**

Itemized Cost Estimate:

			Barrier Height	**6 ft**	
			Length	Segment	Length
				1	48 ft
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**
090105	Time-Related Overhead (LS)	LS	$12,400.00	1	$12,400
130100	Job Site Management	LS	$6,000.00	1	$6,000
153247	Remove Concrete (Miscellaneous)(CY)	CY	$400.00	1.20	$480
170103	Clearing and Grubbing (LS)	LS	$1,100.00	1	$1,100
202038	Packet Fertilizer	EA	$8.00	5	$40
204038	Plant (Group U)	EA	$225.00	1	$225
204099	Plant Establishment Work	LS	$3,000.00	1	$3,000
205035	Wood Mulch	CY	$365.00	0.2	$73
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30)	LF	$150.00	40	$6,000
510060	Structural Concrete, Retaining Wall	CY	$1,680.00	44.4	$74,592
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00	4.7	$7,000
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72	668	$3,821
520103	Bar Reinforcing Steel (Retaining Wall)	LB	$5.72	5,168	$29,562
582001	Soundwall (Masonry Block)	SQFT	$45.00	312	$14,040
731502	Minor Concrete (Miscellaneous Construction)	CY	$2,200.00	1.2	$2,640
803020	Remove Fence	LF	$15.00	79	$1,185
210XXX	NPDES Erosion Control	LS	$5,000.00	1	$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	2	$13,000
	Traffic Control, Minor items, etc.	LS	$10,000.00	1	$10,000
	Landscaping Restoration	LS	$5,000.00	1	$5,000
999990	Mobilization	LS	$20,000.00	1	$20,000
	Permanent Footing Easement (2' wide)	LS	$3,000.00	1	$3,000
	Temporary Construction Easement (29,400 SF)*	LS	$181,000.00	1	$181,000
	Appraisal Fee (1 property)	EA	$10,000.00	1	$10,000
	Title Fee (1 property)	EA	$650.00	1	$650
	Inspection Fee (1 property)	EA	$500.00	1	$500
	Design Fee	LS	$8,000.00	1	$8,000
			Estimated Barrier Cost:		**$419,000**

* Includes temporary access from nearest public street through private road for construction vehicle & drill rig.

36. BARRIER SW1905

Type: Masonry Block on Pile Cap (Case 1 per Caltrans Standard Plan B15-3)
Total Barrier length: 61 ft
Benefitted Receptors: 1
Total Cost Allowance: $146,000
Estimated Barrier Cost: $295,000
Cost Reasonable: **No**

Itemized Cost Estimate:

			Barrier Height	**6 ft**		**8 ft**		
			Length of Stepped Wall Segments	Segment 1	Length 22 ft	Segment 2	Length 39 ft	
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Cost Subtotals**
090105	Time-Related Overhead (LS)	LS	$13,300.00	1	$13,300			$13,300
130100	Job Site Management	LS	$6,000.00	1	$6,000			$6,000
153247	Remove Concrete (Miscellaneous)(CY)	CY	$400.00	1.2	$489	2.2	$867	$1,356
170103	Clearing and Grubbing (LS)	LS	$200.00	1	$200			$200
498016	16" Dia CIDH Concrete Piling (Case 1, Φ = 30)	LF	$150.00	11	$1,697	22	$3,258	$4,955
510060	Structural Concrete, Retaining Wall	CY	$1,680.00	14.0	$23,520	25.0	$42,000	$65,520
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00	2.1	$3,208	3.8	$5,688	$8,896
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72	306	$1,751	543	$3,105	$4,856
520103	Bar Reinforcing Steel (Retaining Wall)	LB	$5.72	1,630	$9,321	2,910	$16,645	$25,967
582001	Soundwall (Masonry Block)	SQFT	$45.00	143	$6,435	332	$14,918	$21,353
600017	Remove Retaining Wall (LF)	LF	$200.00	22	$4,400	39	$7,800	$12,200
731502	Minor Concrete (Miscellaneous Construction)	CY	$2,200.00	1.2	$2,689	2.2	$4,767	$7,456
210XXX	NPDES Erosion Control	LS	$5,000.00	1	$5,000			$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	2	$13,000			$13,000
	Traffic Control, Minor items, etc.	LS	$10,000.00	1	$10,000			$10,000
	Landscaping Restoration	LS	$10,000.00	1	$10,000			$10,000
999990	Mobilization	LS	$22,000.00	1	$22,000			$22,000
	Permanent Footing Easement (2' wide)	LS	$3,000.00	1	$3,000			$3,000
	Temporary Construction Easement (6,200 SF)*	LS	$39,000.00	1	$39,000			$39,000
	Appraisal Fee (1 property)	EA	$10,000.00	1	$10,000			$10,000
	Title Fee (1 property)	EA	$650.00	1	$650			$650
	Inspection Fee (1 property)	EA	$500.00	1	$500			$500
	Design Fee	LS	$9,000.00	1	$9,000			$9,000
						Estimated Barrier Cost:		**$295,000**

* Includes temporary access from local street and private driveway for construction vehicle & drill rig.

37. BARRIER SW1907

Type: Masonry Block on Pile Cap (Case 2 per Caltrans Standard Plan B15-3)
Total Barrier length: 78 ft
Benefitted Receptors: 1
Total Cost Allowance: $146,000
Estimated Barrier Cost: $350,000
Cost Reasonable: **No**

Itemized Cost Estimate:

				Barrier Height	6 ft		8 ft		
				Length of Stepped Wall Segments	Segment 1, 3	Length 62 ft	Segment 2	Length 16 ft	
Code	**Description**	**Unit**	**Unit Price**		**Quantity**	**Cost**	**Quantity**	**Cost**	**Cost Subtotals**
090105	Time-Related Overhead (LS)	LS	$16,700.00		1	$16,700			$16,700
130100	Job Site Management	LS	$6,000.00		1	$6,000			$6,000
153247	Remove Concrete (Miscellaneous)(CY)	CY	$400.00		3.4	$1,378	0.9	$356	$1,733
170103	Clearing and Grubbing (LS)	LS	$2,200.00		1	$2,200			$2,200
202038	Packet Fertilizer	EA	$8.00		10	$80			$80
204038	Plant (Group U)	EA	$225.00		2	$450			$450
204099	Plant Establishment Work	LS	$3,000.00		1	$3,000			$3,000
205035	Wood Mulch	CY	$365.00		0.4	$146			$146
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30)	LF	$150.00		51	$7,706	16	$2,400	$10,106
510060	Structural Concrete, Retaining Wall	CY	$1,680.00		40.0	$67,200	10.0	$16,800	$84,000
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00		6.0	$9,042	1.6	$2,333	$11,375
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72		863	$4,935	223	$1,274	$6,209
520103	Bar Reinforcing Steel (Retaining Wall)	LB	$5.72		4,656	$26,632	1,164	$6,658	$33,290
582001	Soundwall (Masonry Block)	SQFT	$45.00		403	$18,135	136	$6,120	$24,255
600017	Remove Retaining Wall (LF)	LF	$200.00		62	$12,400	16	$3,200	$15,600
731502	Minor Concrete (Miscellaneous Construction)	CY	$2,200.00		3.4	$7,578	0.9	$1,956	$9,533
210XXX	NPDES Erosion Control	LS	$5,000.00		1	$5,000			$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00		2	$13,000			$13,000
	Traffic Control, Minor items, etc.	LS	$10,000.00		1	$10,000			$10,000
	Landscaping Restoration	LS	$10,000.00		1	$10,000			$10,000
999990	Mobilization	LS	$27,000.00		1	$27,000			$27,000
	Permanent Footing Easement (2' wide)	LS	$4,000.00		1	$4,000			$4,000
	Temporary Construction Easement (5,400 SF)*	LS	$34,000.00		1	$34,000			$34,000
	Appraisal Fee (1 property)	EA	$10,000.00		1	$10,000			$10,000
	Title Fee (1 property)	EA	$650.00		1	$650			$650
	Inspection Fee (1 property)	EA	$500.00		1	$500			$500
	Design Fee	LS	$11,000.00		1	$11,000			$11,000
							Estimated Barrier Cost:		**$350,000**

* Includes temporary access from local street and private driveway for construction vehicle & drill rig.

39. BARRIER SW1913

Type: Masonry Block on Pile Cap (Case 1 per Caltrans Standard Plan B15-3)
Total Barrier length: 172 ft
Benefitted Receptors: 1
Total Cost Allowance: $146,000
Estimated Barrier Cost: $1,025,000
Cost Reasonable: **No**

Itemized Cost Estimate:

				Barrier Height	6 ft		8 ft		
				Length of Stepped Wall Segments	Segment 1, 3	Length 155 ft	Segment 2	Length 17 ft	Cost
Code	**Description**	**Unit**	**Unit Price**		**Quantity**	**Cost**	**Quantity**	**Cost**	**Subtotals**
090105	Time-Related Overhead (LS)	LS	$50,800.00		1	$50,800			$50,800
130100	Job Site Management	LS	$6,000.00		1	$6,000			$6,000
153247	Remove Concrete (Miscellaneous)(CY)	CY	$400.00		465.0	$186,000	51.0	$20,400	$206,400
170103	Clearing and Grubbing (LS)	LS	$3,400.00		1	$3,400			$3,400
202038	Packet Fertilizer	EA	$8.00		15	$120			$120
204038	Plant (Group U)	EA	$225.00		3	$675			$675
204099	Plant Establishment Work	LS	$3,000.00		1	$3,000			$3,000
205035	Wood Mulch	CY	$365.00		0.6	$219			$219
498016	16" Dia CIDH Concrete Piling (Case 1, Φ = 30)	LF	$150.00		74	$11,048	10	$1,505	$12,553
510060	Structural Concrete, Retaining Wall	CY	$1,680.00		101.0	$169,680	11.0	$18,480	$188,160
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00		15.1	$22,604	1.7	$2,479	$25,083
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72		2,157	$12,339	237	$1,353	$13,692
520103	Bar Reinforcing Steel (Retaining Wall)	LB	$5.72		11,756	$67,247	1,280	$7,324	$74,570
582001	Soundwall (Masonry Block)	SQFT	$45.00		1,008	$45,338	145	$6,503	$51,840
600017	Remove Retaining Wall (LF)	LF	$200.00		155	$31,000	17	$3,400	$34,400
731519	Minor Concrete (Stamped Concrete)	SQFT	$55.00		465.0	$25,575	51.0	$2,805	$28,380
210XXX	NPDES Erosion Control	LS	$5,000.00		1	$5,000			$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00		2	$13,000			$13,000
	Traffic Control, Minor items, etc.	LS	$10,000.00		1	$10,000			$10,000
	Demolish Building Structure	LS	$15,000.00		1	$15,000			$15,000
	Reconstruct Building Structure	LS	$50,000.00		1	$50,000			$50,000
	Landscaping Restoration	LS	$10,000.00		1	$10,000			$10,000
999990	Mobilization	LS	$81,000.00		1	$81,000			$81,000
	Permanent Footing Easement (2' wide)	LS	$8,000.00		1	$8,000			$8,000
	Temporary Construction Easement (14,400 SF)*	LS	$89,000.00		1	$89,000			$89,000
	Appraisal Fee (1 property)	EA	$10,000.00		1	$10,000			$10,000
	Title Fee (1 property)	EA	$650.00		1	$650			$650
	Inspection Fee (1 property)	EA	$500.00		1	$500			$500
	Design Fee	LS	$33,000.00		1	$33,000			$33,000
							Estimated Barrier Cost:		**$1,025,000**

* Includes temporary access from local street and private driveway for construction vehicle & drill rig.

46. BARRIER SW2007C

Type: Masonry Block on Pile Cap (Case 2 per Caltrans Standard Plan B15-3)
Total Barrier length: 638 ft
Benefitted Receptors: 6
Total Cost Allowance: $876,000
Estimated Barrier Cost: $1,477,000
Cost Reasonable: **No**

Itemized Cost Estimate:

			Barrier Height	**6 ft**		**8 ft**		**10 ft**		
			Length of Stepped Wall	Segment	Length	Segment	Length	Segment	Length	
			Segments	1, 5	144 ft	2, 4	154 ft	5	340 ft	**Cost**
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Subtotals**
090105	Time-Related Overhead (LS)	LS	$57,200.00	1	$57,200					$57,200
130100	Job Site Management	LS	$8,000.00	1	$8,000					$8,000
170103	Clearing and Grubbing (LS)	LS	$19,300.00	1	$19,300					$19,300
202038	Packet Fertilizer	EA	$8.00	90	$720					$720
204038	Plant (Group U)	EA	$225.00	18	$4,050					$4,050
204099	Plant Establishment Work	LS	$8,000.00	1	$8,000					$8,000
205035	Wood Mulch	CY	$365.00	3.6	$1,314					$1,314
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30)	LF	$150.00	118	$17,700	145	$21,806	364	$54,550	$94,056
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00	14.0	$21,000	15.0	$22,458	33.1	$49,583	$93,042
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72	2,004	$11,463	2,143	$12,259	4,756	$27,205	$50,928
582001	Soundwall (Masonry Block)	SQFT	$45.00	936	$42,120	1,309	$58,905	3,570	$160,650	$261,675
582001	Access Gate (Soundwall)	EA	$10,000.00	6	$60,000					$60,000
600051A	Remove Wall/Fence	LF	$150.00	144	$21,600	154	$23,100	340	$51,000	$95,700
731502	Minor Concrete (Miscellaneous Construction)	CY	$2,200.00	0.9	$2,035					$2,035
210XXX	NPDES Erosion Control	LS	$15,000.00	1	$15,000					$15,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	3	$19,500					$19,500
	Traffic Control, Minor items, etc.	LS	$20,000.00	1	$20,000					$20,000
	Remove Pilasters	EA	$1,000.00	14	$14,000					$14,000
	Landscaping Restoration	LS	$80,000.00	1	$80,000					$80,000
999990	Mobilization	LS	$91,000.00	1	$91,000					$91,000
	Permanent Footing Easement (2' wide)	LS	$29,000.00	1	$29,000					$29,000
	Temporary Construction Easement (53,937 SF)*	LS	$337,000.00	1	$337,000					$337,000
	Appraisal Fee (7 properties)	EA	$10,000.00	7	$70,000					$70,000
	Title Fee (7 properties)	EA	$650.00	7	$4,550					$4,550
	Inspection Fee (7 properties)	EA	$500.00	7	$3,500					$3,500
	Design Fee	LS	$37,000.00	1	$37,000					$37,000
									Estimated Barrier Cost:	**$1,477,000**

* Includes 5' inside properties at sounwall location, sloped area behind residential properties, and temporary access from local street through commercial property private drive isle for construction vehicle & drill rig.

Appendix D

Constant-Height Barrier Cost Summary and Cost Estimate Details

I-15 ELPSE NOISE BARRIER COST DEVELOPMENT

Appendix D-1

Summary of Basic Cost Estimates for Noise Barriers at Various Constant Heights

Base Cost Allowance per Benefitted Receptor: $146,000

Barrier ID (Length)	Type	Location	Height	Accoustically Feasible?	Number of Benefited Receptors	Design Goal Achieved?	Total Reasonable Allowance	Estimated Construction Cost	Cost Less than Allowance?	Recommended for Construction?
Noise Analysis Area 1										
SW1142B	Masonry Block on	R/W	14 ft	Yes	1	No	$146,000	$1,122,300	No	No
(725 ft)	Type 836S Barrier		16 ft	Yes	1	No	$146,000	$1,225,250	No	No
			18 ft	Yes	2	No	$292,000	$1,290,500	No	No
			20 ft	Yes	2	Yes	$292,000	$1,355,750	No	No
Noise Analysis Area 2										
SW1109A	Masonry Block on	ES	8 ft	Yes	1	No	$146,000	$1,183,520	No	No
(407 ft)	Type 836S Barrier		10 ft	Yes	1	No	$146,000	$1,338,480	No	No
+ SW1109B		ES	12 ft	Yes	1	Yes	$146,000	$1,470,560	No	No
(633 ft)			14 ft	Yes	1	Yes	$146,000	$1,609,920	No	No
SW1137B	Masonry Block on	Private	12	Yes	1	No	$146,000	$211,083	No	No
(213 ft)	Pile Cap	property	14	Yes	1	No	$146,000	$238,986	No	No
			16	Yes	1	Yes	$146,000	$271,575	No	No
Noise Analysis Area 3										
SW1204	Masonry Block on	Private	8 ft	Yes	1	Yes	$146,000	$179,760	No	No
(240 ft)	Pile Cap	property	10 ft	Yes	1	Yes	$146,000	$206,160	No	No
			12 ft	Yes	1	Yes	$146,000	$237,840	No	No
			14 ft	Yes	1	Yes	$146,000	$269,280	No	No
			16 ft	Yes	1	Yes	$146,000	$306,000	No	No
SW1208B	Masonry Block on	Private	8 ft	Yes	1	No	$146,000	$280,875	No	No
(375 ft)	Pile Cap	property	10 ft	Yes	1	No	$146,000	$322,125	No	No
			12 ft	Yes	2	Yes	$292,000	$371,625	No	No
			14 ft	Yes	2	Yes	$292,000	$420,750	No	No
			16 ft	Yes	2	Yes	$292,000	$478,125	No	No
SW1208D	Masonry Block on	R/W	12 ft	Yes	1	No	$146,000	$1,084,154	No	No
(1094 ft)	Pile Cap		14 ft	Yes	1	No	$146,000	$1,227,468	No	No
			16 ft	Yes	1	Yes	$146,000	$1,394,850	No	No
			18 ft	Yes	2	Yes	$292,000	$1,493,310	No	No
			20 ft	Yes	2	Yes	$292,000	$1,591,770	No	No
SW1210 [3]	Masonry Block on	Private	6 ft	Yes	1	No	$146,000	$188,000	No	No
(135 ft)	Pile Cap	property	8 ft	Yes	1	No	$146,000	$203,000	No	No
			10 ft	Yes	1	Yes	$146,000	$217,000	No	No
			12 ft	Yes	1	Yes	$146,000	$231,000	No	No
			14 ft	Yes	1	Yes	$146,000	$247,000	No	No
			16 ft	Yes	1	Yes	$146,000	$263,000	No	No
SW1212	Masonry Block on	Private	6 ft	Yes	1	No	$146,000	$310,400	No	No
(485 ft)	Pile Cap	property	8 ft	Yes	1	No	$146,000	$363,265	No	No
			10 ft	Yes	1	No	$146,000	$416,615	No	No
			12 ft	Yes	1	Yes	$146,000	$480,635	No	No
			14 ft	Yes	1	Yes	$146,000	$544,170	No	No
			16 ft	Yes	1	Yes	$146,000	$618,375	No	No
SW1214A	Masonry Block on	Between ES	10 ft	Yes	7	No	$1,022,000	$3,217,500	No	No
(2500 ft)	Type 836S Barrier	& R/W	12 ft	Yes	8	Yes	$1,168,000	$3,535,000	No	No
			14 ft	Yes	10	Yes	$1,460,000	$3,870,000	No	No
SW1214B	Masonry Block on	Private	6 ft	Yes	8	Yes	$1,168,000	$1,358,720	No	No
(2123 ft)	Pile Cap	property	8 ft	Yes	9	Yes	$1,314,000	$1,590,127	No	No
			10 ft	Yes	9	Yes	$1,314,000	$1,823,657	No	No
			12 ft	Yes	9	Yes	$1,314,000	$2,103,893	No	No
			14 ft	Yes	9	Yes	$1,314,000	$2,382,006	No	No
			16 ft	Yes	9	Yes	$1,314,000	$2,706,825	No	No
SW1214C	Masonry Block on	ES	8 ft	Yes	5	No	$730,000	$2,845,000	No	No
(2500 ft)	Type 836S Barrier		10 ft	Yes	9	Yes	$1,314,000	$3,217,500	No	No
			12 ft	Yes	9	Yes	$1,314,000	$3,535,000	No	No
			14 ft	Yes	10	Yes	$1,460,000	$3,870,000	No	No
SW1214D	Masonry Block on	R/W	10 ft	Yes	6	No	$876,000	$1,946,494	No	No
(2266 ft)	Pile Cap		12 ft	Yes	6	Yes	$876,000	$2,245,606	No	No
			14 ft	Yes	6	Yes	$876,000	$2,542,452	No	No
			16 ft	Yes	6	Yes	$876,000	$2,889,150	No	No
			18 ft	Yes	7	Yes	$1,022,000	$3,093,090	No	No
			20 ft	Yes	9	Yes	$1,314,000	$3,297,030	No	No

Barrier ID (Length)	Type	Location	Height	Accoustically Feasible?	Number of Benefited Receptors	Design Goal Achieved?	Total Reasonable Allowance	Estimated Construction Cost	Cost Less than Allowance?	Recommended for Construction?
SW1226A	Masonry Block on	ES	8 ft	Yes	8	No	$1,168,000	$3,243,300	No	No
(2850 ft)	Type 836S Barrier		10 ft	Yes	10	Yes	$1,460,000	$3,667,950	No	No
			12 ft	Yes	10	Yes	$1,460,000	$4,029,900	No	No
			14 ft	Yes	12	Yes	$1,752,000	$4,411,800	No	No
SW1226B	Masonry Block on	Between ES	10 ft	Yes	7	No	$1,022,000	$3,603,600	No	No
(2800 ft)	Type 836S Barrier	& R/W	12 ft	Yes	9	Yes	$1,314,000	$3,959,200	No	No
			14 ft	Yes	12	Yes	$1,752,000	$4,334,400	No	No
SW1226C	Masonry Block on	R/W	10 ft	Yes	6	No	$876,000	$2,431,829	No	No
(2831 ft)	Pile Cap		12 ft	Yes	7	Yes	$1,022,000	$2,805,521	No	No
			14 ft	Yes	7	Yes	$1,022,000	$3,176,382	No	No
			16 ft	Yes	7	Yes	$1,022,000	$3,609,525	No	No
			18 ft	Yes	8	Yes	$1,168,000	$3,864,315	No	No
			20 ft	Yes	11	Yes	$1,606,000	$4,119,105	No	No
SW1238	Masonry Block on	Private	6 ft	Yes	1	No	$146,000	$177,510	No	No
(291 ft)	Spread Footing Case 2	property	8 ft	Yes	1	No	$146,000	$219,705	No	No
	for heights up to 8 ft and		10 ft	Yes	1	Yes	$146,000	$249,969	No	No
	on Pile Cap at heights of		12 ft	Yes	1	Yes	$146,000	$288,381	No	No
	10 ft or more [4]		14 ft	Yes	1	Yes	$146,000	$326,502	No	No
			16 ft	Yes	1	Yes	$146,000	$371,025	No	No
Noise Analysis Area 8										
SW1521C	Masonry Block on	Private	10 ft	Yes	1	No	$146,000	$330,715	No	No
(385 ft)	Pile Cap	property	12 ft	Yes	1	No	$146,000	$381,535	No	No
			14 ft	Yes	1	No	$146,000	$431,970	No	No
			16 ft	Yes	1	Yes	$146,000	$490,875	No	No
Noise Analysis Area 12										
SW1691 [3]	Masonry Block on	Private	6 ft	Yes	1	Yes	$146,000	$192,000	No	No
(75 ft)	Pile Cap	property	8 ft	Yes	1	Yes	$146,000	$201,000	No	No
			10 ft	Yes	1	Yes	$146,000	$210,000	No	No
			12 ft	Yes	1	Yes	$146,000	$220,000	No	No
			14 ft	Yes	1	Yes	$146,000	$231,000	No	No
			16 ft	Yes	1	Yes	$146,000	$243,000	No	No
SW1693 [3]	Masonry Block on	Private	6 ft	Yes	1	Yes	$146,000	$214,000	No	No
(150 ft)	Pile Cap	property	8 ft	Yes	1	Yes	$146,000	$230,000	No	No
			10 ft	Yes	1	Yes	$146,000	$246,000	No	No
			12 ft	Yes	1	Yes	$146,000	$262,000	No	No
			14 ft	Yes	1	Yes	$146,000	$280,000	No	No
			16 ft	Yes	1	Yes	$146,000	$297,000	No	No
SW1751B [3]	Masonry Block on	Private	6 ft	Yes	1	No	$146,000	$235,000	No	No
(113 ft)	Pile Cap	property	8 ft	Yes	1	Yes	$146,000	$248,000	No	No
			10 ft	Yes	1	Yes	$146,000	$261,000	No	No
			12 ft	Yes	1	Yes	$146,000	$277,000	No	No
			14 ft	Yes	1	Yes	$146,000	$293,000	No	No
			16 ft	Yes	1	Yes	$146,000	$311,000	No	No
Noise Analysis Area 13										
SW1784B	Masonry Block on	Private	8 ft	Yes	1	Yes	$146,000	$227,088	No	No
(304 ft)	Spread Footing Case 1	property	10 ft	Yes	1	Yes	$146,000	$261,136	No	No
	at 8 ft height and		12 ft	Yes	1	Yes	$146,000	$301,264	No	No
	on Pile Cap at heights of		14 ft	Yes	1	Yes	$146,000	$341,088	No	No
	10 ft or more [4]		16 ft	Yes	1	Yes	$146,000	$387,600	No	No
SW1872	Masonry Block on	R/W	12 ft	Yes	1	No	$146,000	$656,042	No	No
(662 ft)	Pile Cap		14 ft	Yes	2	Yes	$292,000	$742,764	No	No
			16 ft	Yes	3	Yes	$438,000	$844,050	No	No
			18 ft	Yes	3	Yes	$438,000	$903,630	No	No
SW1874	Masonry Block on	ES	6 ft	Yes	1	No	$146,000	$628,800	No	No
(600 ft)	Type 836S Barrier		8 ft	Yes	1	No	$146,000	$682,800	No	No
			10 ft	Yes	2	Yes	$292,000	$772,200	No	No
			12 ft	Yes	2	Yes	$292,000	$848,400	No	No
			14 ft	Yes	2	Yes	$292,000	$928,800	No	No
SW1874	Masonry Block on	ES	6 ft	Yes	1	No	$146,000	$1,283,800	No	No
(700 ft)	Type 836S Barrier		8 ft	Yes	1	Yes	$146,000	$1,394,050	No	No
+ SW1878		ES	10 ft	Yes	3	Yes	$438,000	$1,576,575	No	No
(525 ft)			12 ft	Yes	3	Yes	$438,000	$1,732,150	No	No
			14 ft	Yes	3	Yes	$438,000	$1,896,300	No	No

Barrier ID (Length)	Type	Location	Height	Accoustically Feasible?	Number of Benefited Receptors	Design Goal Achieved?	Total Reasonable Allowance	Estimated Construction Cost	Cost Less than Allowance?	Recommended for Construction?
Noise Analysis Area 14										
SW1789 [3]	Masonry Block on	Private	8 ft	Yes	1	Yes	$146,000	$324,000	No	No
(164 ft)	Spread Footing	property	10 ft	Yes	1	Yes	$146,000	$349,000	No	No
			12 ft	Yes	1	Yes	$146,000	$374,000	No	No
			14 ft	Yes	1	Yes	$146,000	$402,000	No	No
			16 ft	Yes	1	Yes	$146,000	$439,000	No	No
SW1823 [3]	Masonry Block on	Private	10 ft	Yes	2	No	$292,000	$1,686,000	No	No
(743 ft)	Pile Cap	property	12 ft	Yes	10	No	$1,460,000	$1,690,000	No	No
			14 ft	Yes	10	No	$1,460,000	$1,794,000	No	No
			16 ft	Yes	10	Yes	$1,460,000	$1,915,000	No	No
SW1831 [3]	Masonry Block on	Private	8 ft	Yes	1	No	$146,000	$574,000	No	No
(399 ft)	Pile Cap	property	10 ft	Yes	3	Yes	$438,000	$621,000	No	No
			12 ft	Yes	3	Yes	$438,000	$677,000	No	No
			14 ft	Yes	3	Yes	$438,000	$733,000	No	No
			16 ft	Yes	3	Yes	$438,000	$798,000	No	No
SW1833 [3]	Masonry Block on	Private	10 ft	Yes	1	No	$146,000	$535,000	No	No
(205 ft)	Pile Cap	property	12 ft	Yes	2	Yes	$292,000	$564,000	No	No
			14 ft	Yes	4	Yes	$584,000	$592,000	No	No
			16 ft	Yes	4	Yes	$584,000	$626,000	No	No
SW1839 [3]	Masonry Block on	Private	10 ft	Yes	1	No	$146,000	$1,273,000	No	No
(674 ft)	Pile Cap	property	12 ft	Yes	3	Yes	$438,000	$1,368,000	No	No
			14 ft	Yes	3	Yes	$438,000	$1,463,000	No	No
			16 ft	Yes	7	Yes	$1,022,000	$1,572,000	No	No
SW1875 [3]	Masonry Block on	Private	6 ft	Yes	1	Yes	$146,000	$279,000	No	No
(120 ft)	Pile Cap	property	8 ft	Yes	1	Yes	$146,000	$291,000	No	No
			10 ft	Yes	1	Yes	$146,000	$304,000	No	No
			12 ft	Yes	1	Yes	$146,000	$317,000	No	No
			14 ft	Yes	1	Yes	$146,000	$331,000	No	No
			16 ft	Yes	1	Yes	$146,000	$344,000	No	No
Noise Analysis Area 15										
SW1890A [3]	Masonry Block on	ES	10 ft	Yes	12	No	$1,752,000	$4,571,000	No	No
(1550 ft)	Type 836S Barrier		12 ft	Yes	45	Yes	$6,570,000	$5,018,000	Yes	Yes
+ SW1890B		ES	14 ft	Yes	65	Yes	$9,490,000	$5,410,000	Yes	Yes
(1194 ft)										
SW1890A [3]	Masonry Block on	ES	8 ft	Yes	7	No	$1,022,000	$3,816,000	No	No
(1600 ft)	Type 836S Barrier		10 ft	Yes	31	No	$4,526,000	$4,226,000	Yes	Yes
+ SW1890C		R/W	12 ft	Yes	70	Yes	$10,220,000	$4,613,000	Yes	Yes
(1388 ft)			14 ft	Yes	85	Yes	$12,410,000	$5,012,000	Yes	Yes
			16 ft	Yes	92	Yes	$13,432,000	$5,200,000	Yes	Yes
			18 ft	Yes	98	Yes	$14,308,000	$5,334,000	Yes	Yes
			20 ft	Yes	109	Yes	$15,914,000	$5,467,000	Yes	Yes
Noise Analysis Area 16										
SW1895 [3]	Masonry Block on	Private	6 ft	Yes	1	Yes	$146,000	$269,000	No	No
(63 ft)	Pile Cap	property	8 ft	Yes	1	Yes	$146,000	$276,000	No	No
			10 ft	Yes	1	Yes	$146,000	$284,000	No	No
			12 ft	Yes	1	Yes	$146,000	$293,000	No	No
			14 ft	Yes	1	Yes	$146,000	$301,000	No	No
			16 ft	Yes	1	Yes	$146,000	$312,000	No	No
SW1899 [3]	Masonry Block on	Private	6 ft	Yes	1	Yes	$146,000	$419,000	No	No
(48 ft)	Pile Cap	property	8 ft	Yes	1	Yes	$146,000	$424,000	No	No
			10 ft	Yes	1	Yes	$146,000	$430,000	No	No
			12 ft	Yes	1	Yes	$146,000	$437,000	No	No
			14 ft	Yes	1	Yes	$146,000	$443,000	No	No
			16 ft	Yes	1	Yes	$146,000	$451,000	No	No
SW1903	Masonry Block on	R/W	16 ft	Yes	1	No	$146,000	$1,522,350	No	No
(1194 ft)	Pile Cap		18 ft	Yes	2	No	$292,000	$1,629,810	No	No
			20 ft	Yes	2	Yes	$292,000	$1,737,270	No	No
SW1905 [3]	Masonry Block on	Private	8 ft	Yes	1	Yes	$146,000	$297,000	No	No
(61 ft)	Pile Cap	property	10 ft	Yes	1	Yes	$146,000	$303,000	No	No
			12 ft	Yes	1	Yes	$146,000	$310,000	No	No
			14 ft	Yes	1	Yes	$146,000	$317,000	No	No
			16 ft	Yes	1	Yes	$146,000	$324,000	No	No

Barrier ID (Length)	Type	Location	Height	Accoustically Feasible?	Number of Benefited Receptors	Design Goal Achieved?	Total Reasonable Allowance	Estimated Construction Cost	Cost Less than Allowance?	Recommended for Construction?
SW1907 [3]	Masonry Block on	Private	6 ft	Yes	1	No	$146,000	$348,000	No	No
(78 ft)	Pile Cap	property	8 ft	Yes	1	Yes	$146,000	$357,000	No	No
			10 ft	Yes	1	Yes	$146,000	$366,000	No	No
			12 ft	Yes	1	Yes	$146,000	$377,000	No	No
			14 ft	Yes	1	Yes	$146,000	$388,000	No	No
			16 ft	Yes	1	Yes	$146,000	$401,000	No	No
SW1911	Masonry Block on	ES	12 ft	Yes	1	No	$146,000	$1,644,482	No	No
(1163 ft)	Type 836S Barrier		14 ft	Yes	1	Yes	$146,000	$1,800,324	No	No
SW1913 [3]	Masonry Block on	Private	6 ft	Yes	1	No	$146,000	$1,023,000	No	No
(172 ft)	Pile Cap	property	8 ft	Yes	1	Yes	$146,000	$1,041,000	No	No
			10 ft	Yes	1	Yes	$146,000	$1,059,000	No	No
			12 ft	Yes	1	Yes	$146,000	$1,078,000	No	No
			14 ft	Yes	1	Yes	$146,000	$1,098,000	No	No
			16 ft	Yes	1	Yes	$146,000	$1,117,000	No	No
Noise Analysis Area 18										
SW1996A	Masonry Block on	ES	6 ft	Yes	3	No	$438,000	$2,302,174	No	No
(585 ft)	Type 836S Barrier		8 ft	Yes	8	Yes	$1,168,000	$2,302,174	No	No
+ SW1996B		ES	10 ft	Yes	10	Yes	$1,460,000	$2,603,601	No	No
(1438 ft)			12 ft	Yes	11	Yes	$1,606,000	$2,860,522	No	No
			14 ft	Yes	14	Yes	$2,044,000	$3,131,604	No	No
SW1996B	Masonry Block on	ES	6 ft	Yes	2	No	$292,000	$1,583,528	No	No
(1511 ft)	Type 836S Barrier		8 ft	Yes	6	No	$876,000	$1,719,518	No	No
			10 ft	Yes	6	No	$876,000	$1,944,657	No	No
			12 ft	Yes	8	Yes	$1,168,000	$2,136,554	No	No
			14 ft	Yes	13	Yes	$1,898,000	$2,339,028	No	No
SW1996C	Masonry Block on	R/W	12 ft	Yes	1	No	$146,000	$1,269,471	No	No
(1281 ft)	Pile Cap		14 ft	Yes	3	No	$438,000	$1,437,282	No	No
			16 ft	Yes	6	Yes	$876,000	$1,633,275	No	No
			18 ft	Yes	9	Yes	$1,314,000	$1,748,565	No	No
			20 ft	Yes	9	Yes	$1,314,000	$1,863,855	No	No
Noise Analysis Area 19										
SW2001	Masonry Block on	ES	6 ft	Yes	1	No	$146,000	$1,015,096	No	No
(255 ft)	Type 836S Barrier		8 ft	Yes	2	Yes	$292,000	$1,015,096	No	No
+ SW2007A		ES	10 ft	Yes	5	Yes	$730,000	$1,148,004	No	No
(637 ft)			12 ft	Yes	5	Yes	$730,000	$1,261,288	No	No
			14 ft	Yes	5	Yes	$730,000	$1,380,816	No	No
SW2007A	Masonry Block on	ES	6 ft	Yes	1	No	$146,000	$719,976	No	No
(687 ft)	Type 836S Barrier		8 ft	Yes	2	Yes	$292,000	$781,806	No	No
			10 ft	Yes	5	Yes	$730,000	$884,169	No	No
			12 ft	Yes	5	Yes	$730,000	$971,418	No	No
			14 ft	Yes	5	Yes	$730,000	$1,063,476	No	No
SW2007B	Masonry Block on	R/W	14 ft	Yes	1	No	$146,000	$916,416	No	No
(592 ft)	Type 836S Barrier		16 ft	Yes	2	Yes	$292,000	$1,000,480	No	No
			18 ft	Yes	5	Yes	$730,000	$1,053,760	No	No
			20 ft	Yes	5	Yes	$730,000	$1,107,040	No	No
SW2007C [3]	Masonry Block on	Private	6 ft	Yes	3	No	$438,000	$1,380,000	No	No
(638 ft)	Pile Cap	property	8 ft	Yes	3	No	$438,000	$1,454,000	No	No
			10 ft	Yes	6	Yes	$876,000	$1,528,000	No	No
			12 ft	Yes	6	Yes	$876,000	$1,618,000	No	No
			14 ft	Yes	6	Yes	$876,000	$1,708,000	No	No
			16 ft	Yes	6	Yes	$876,000	$1,812,000	No	No

Notes:

1. See Step 1B of the cost screening analysis for calculation details of the basic costs per linear foot for barriers on different foundation types.
2. Based on the foundation type selected, the applicable basic cost per linear foot was multiplied by the length of the noise barriers to calculate the basic cost of each barrier.
3. More detailed costs estimates were developed for barriers that passed the first two steps (1A and 1B) of the cost screening process, see Appendix D-2.
4. In some cases the least expensive foundation type was selected for different wall heights of the same barrier and as site conditions allow it.

I-15 ELPSE SUMMARY OF NOISE BARRIER COST REASONABLENESS

Appendix D-2
Cost Estimate Details for Noise Barriers at Various Constant Heights

Notes:
1. The cost estimates include the construction items identified with the current information available. Additional items may be required during final design for any barriers recommended for construction.
2. See cost estimate details in Appendix C for Design Fee and Mobilization cost calculations.

$146,000 Applicable base cost allowance per benefitted receptor at the time of cost estimate development.
6.75% For Time-Related Overhead (TRO)(percent from contract items only, excludes right-of-way items).

7. BARRIER SW1210

Type: Masonry Block on Pile Cap (Case 1 per Caltrans Standard Plan B15-3)
135 ft Barrier length
Minimum barrier height that achieves the noise reduction design goal.

Itemized Cost Estimate:			Barrier Height	6 ft		8 ft		10 ft		12 ft		14 ft		16 ft	
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**
090105	Time-Related Overhead (LS)	LS	Varies	1	$8,400	1	$9,400	1	$10,300	1	$11,200	1	$12,200	1	$13,100
130100	Job Site Management	LS	$6,000.00	1	$6,000	1	$6,000	1	$6,000	1	$6,000	1	$6,000	1	$6,000
170103	Clearing and Grubbing (LS)	LS	$3,300.00	1	$3,300	1	$3,300	1	$3,300	1	$3,300	1	$3,300	1	$3,300
202038	Packet Fertilizer	EA	$8.00	15	$120	15	$120	15	$120	15	$120	15	$120	15	$120
204038	Plant (Group U)	EA	$225.00	3	$675	3	$675	3	$675	3	$675	3	$675	3	$675
204099	Plant Establishment Work	LS	$3,000.00	1	$3,000	1	$3,000	1	$3,000	1	$3,000	1	$3,000	1	$3,000
205035	Wood Mulch	CY	$365.00	0.6	$219	0.6	$219	0.6	$219	0.6	$219	0.6	$219	0.6	$219
206300	Temporary Irrigation System	LS	$1,500.00	1	$1,500	1	$1,500	1	$1,500	1	$1,500	1	$1,500	1	$1,500
498016	16" Dia CIDH Concrete Piling (Case 1, Φ = 30)	LF	$150.00	64	$9,642	73	$10,908	81	$12,173	90	$13,439	107	$16,061	120	$18,063
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00	13.1	$19,688	13.1	$19,688	13.1	$19,688	13.1	$19,688	13.1	$19,688	13.1	$19,688
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72	1,879	$10,747	1,879	$10,747	1,879	$10,747	1,879	$10,747	1,900	$10,866	1,912	$10,939
582001	Soundwall (Masonry Block)	SQFT	$45.00	878	$39,488	1,148	$51,638	1,418	$63,788	1,688	$75,938	1,958	$88,088	2,228	$100,238
803020	Remove Fence	LF	$15.00	135	$2,025	135	$2,025	135	$2,025	135	$2,025	135	$2,025	135	$2,025
210XXX	NPDES Erosion Control	LS	$5,000.00	1	$5,000	1	$5,000	1	$5,000	1	$5,000	1	$5,000	1	$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	2	$13,000	2	$13,000	2	$13,000	2	$13,000	2	$13,000	2	$13,000
	Traffic Control, Minor items, etc.	LS	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
999990	Mobilization	LS	$16,000.00	1	$16,000	1	$16,000	1	$16,000	1	$16,000	1	$16,000	1	$16,000
	Permanent Footing Easement (2' wide)	LS	$6,000.00	1	$6,000	1	$6,000	1	$6,000	1	$6,000	1	$6,000	1	$6,000
	Temporary Construction Easement (145' long x 15' wide)	LS	$15,000.00	1	$15,000	1	$15,000	1	$15,000	1	$15,000	1	$15,000	1	$15,000
	Appraisal Fee (1 property)	EA	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
	Title Fee (1 property)	EA	$650.00	1	$650	1	$650	1	$650	1	$650	1	$650	1	$650
	Inspection Fee (1 property)	EA	$500.00	1	$500	1	$500	1	$500	1	$500	1	$500	1	$500
	Design Fee	LS	$7,000.00	1	$7,000	1	$7,000	1	$7,000	1	$7,000	1	$7,000	1	$7,000
			Estimated Barrier Cost		**$188,000**		**$203,000**		**$217,000**		**$231,000**		**$247,000**		**$263,000**
			Number of Benefitted Receptors		1		1		1		1		1		1
			Total Allowance for this sound wall		**$146,000**		**$146,000**		**$146,000**		**$146,000**		**$146,000**		**$146,000**
			Is the Construction Cost less than the Allowance?		**No**		**No**		**No**		**No**		**No**		**No**

18. BARRIER SW1691

Type: Masonry Block on Pile Cap (Case 2 per Caltrans Standard Plan B15-3)

75 ft Barrier length

Minimum barrier height that achieves the noise reduction design goal.

Itemized Cost Estimate:			Barrier Height	6 ft		8 ft		10 ft		12 ft		14 ft		16 ft	
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**
090105	Time-Related Overhead (LS)	LS	Varies	1	$8,300	1	$8,900	1	$9,400	1	$10,100	1	$10,700	1	$11,500
130100	Job Site Management	LS	$6,000.00	1	$6,000	1	$6,000	1	$6,000	1	$6,000	1	$6,000	1	$6,000
170103	Clearing and Grubbing (LS)	LS	$200.00	1	$200	1	$200	1	$200	1	$200	1	$200	1	$200
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30)	LF	$150.00	62	$9,291	71	$10,697	81	$12,150	101	$15,150	121	$18,150	151	$22,650
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00	7.3	$10,938	7.3	$10,938	7.3	$10,938	7.3	$10,938	7.3	$10,938	7.3	$10,938
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72	1,044	$5,970	1,044	$5,970	1,049	$6,001	1,071	$6,125	1,092	$6,248	1,125	$6,433
582001	Soundwall (Masonry Block)	SQFT	$45.00	488	$21,938	638	$28,688	788	$35,438	938	$42,188	1,088	$48,938	1,238	$55,688
210XXX	NPDES Erosion Control	LS	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	2	$13,000	2	$13,000	2	$13,000	2	$13,000	2	$13,000	2	$13,000
	Traffic Control, Minor items, etc.	LS	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
	Landscaping Restoration	LS	$20,000.00	1	$20,000	1	$20,000	1	$20,000	1	$20,000	1	$20,000	1	$20,000
	Minor Grading for Construction Vehicle Access	LS	$15,000.00	1	$15,000	1	$15,000	1	$15,000	1	$15,000	1	$15,000	1	$15,000
999990	Mobilization	LS	$14,000.00	1	$14,000	1	$14,000	1	$14,000	1	$14,000	1	$14,000	1	$14,000
	Permanent Footing Easement (2' wide)	LS	$4,000.00	1	$4,000	1	$4,000	1	$4,000	1	$4,000	1	$4,000	1	$4,000
	Temporary Construction Easement (270' long x 15' wide)*	LS	$26,000.00	1	$26,000	1	$26,000	1	$26,000	1	$26,000	1	$26,000	1	$26,000
	Appraisal Fee (1 property)	EA	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
	Title Fee (1 property)	EA	$650.00	1	$650	1	$650	1	$650	1	$650	1	$650	1	$650
	Inspection Fee (1 property)	EA	$500.00	1	$500	1	$500	1	$500	1	$500	1	$500	1	$500
	Design Fee	LS	$6,000.00	1	$6,000	1	$6,000	1	$6,000	1	$6,000	1	$6,000	1	$6,000
			Estimated Barrier Cost		**$192,000**		**$201,000**		**$210,000**		**$220,000**		**$231,000**		**$243,000**
			Number of Benefitted Receptors		1		1		1		1		1		1
			Total Allowance for this sound wall		**$146,000**		**$146,000**		**$146,000**		**$146,000**		**$146,000**		**$146,000**
			Is the Construction Cost less than the Allowance?		**No**		**No**		**No**		**No**		**No**		**No**

* Includes temporary closure/use of entire entrance to dog park area for construction vehicles & dril rig.

19. BARRIER SW1693

Type: Masonry Block on Pile Cap (Case 1 per Caltrans Standard Plan B15-3)

150 ft Barrier length

Minimum barrier height that achieves the noise reduction design goal.

Itemized Cost Estimate:			Barrier Height	6 ft		8 ft		10 ft		12 ft		14 ft		16 ft	
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**
090105	Time-Related Overhead (LS)	LS	Varies	1	$9,800	1	$10,800	1	$11,800	1	$12,900	1	$14,000	1	$15,000
130100	Job Site Management	LS	$6,000.00	1	$6,000	1	$6,000	1	$6,000	1	$6,000	1	$6,000	1	$6,000
170103	Clearing and Grubbing (LS)	LS	$300.00	1	$300	1	$300	1	$300	1	$300	1	$300	1	$300
498016	16" Dia CIDH Concrete Piling (Case 1, Φ = 30)	LF	$150.00	71	$10,697	81	$12,103	90	$13,509	99	$14,916	119	$17,829	134	$20,054
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00	14.6	$21,875	14.6	$21,875	14.6	$21,875	14.6	$21,875	14.6	$21,875	14.6	$21,875
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72	2,088	$11,941	2,088	$11,941	2,088	$11,941	2,088	$11,941	2,111	$12,073	2,125	$12,154
582001	Soundwall (Masonry Block)	SQFT	$45.00	975	$43,875	1,275	$57,375	1,575	$70,875	1,875	$84,375	2,175	$97,875	2,475	$111,375
803020	Remove Fence	LF	$15.00	150	$2,250	150	$2,250	150	$2,250	150	$2,250	150	$2,250	150	$2,250
210XXX	NPDES Erosion Control	LS	$5,000.00	1	$5,000	1	$5,000	1	$5,000	1	$5,000	1	$5,000	1	$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	2	$13,000	2	$13,000	2	$13,000	2	$13,000	2	$13,000	2	$13,000
	Traffic Control, Minor items, etc.	LS	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
	Landscaping Restoration	LS	$20,000.00	1	$20,000	1	$20,000	1	$20,000	1	$20,000	1	$20,000	1	$20,000
999990	Mobilization	LS	$16,000.00	1	$16,000	1	$16,000	1	$16,000	1	$16,000	1	$16,000	1	$16,000
	Permanent Footing Easement (2' wide)	LS	$7,000.00	1	$7,000	1	$7,000	1	$7,000	1	$7,000	1	$7,000	1	$7,000
	Temporary Construction Easement (175' long x 15' wide)*	LS	$18,000.00	1	$18,000	1	$18,000	1	$18,000	1	$18,000	1	$18,000	1	$18,000
	Appraisal Fee (1 property)	EA	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
	Title Fee (1 property)	EA	$650.00	1	$650	1	$650	1	$650	1	$650	1	$650	1	$650
	Inspection Fee (1 property)	EA	$500.00	1	$500	1	$500	1	$500	1	$500	1	$500	1	$500
	Design Fee	LS	$7,000.00	1	$7,000	1	$7,000	1	$7,000	1	$7,000	1	$7,000	1	$7,000
			Estimated Barrier Cost		**$214,000**		**$230,000**		**$246,000**		**$262,000**		**$280,000**		**$297,000**
			Number of Benefitted Receptors		1		1		1		1		1		1
			Total Allowance for this sound wall		**$146,000**		**$146,000**		**$146,000**		**$146,000**		**$146,000**		**$146,000**
			Is the Construction Cost less than the Allowance?		**No**		**No**		**No**		**No**		**No**		**No**

* Includes temporary access from local street for construction vehicles & drill rig.

20. BARRIER SW1751B

Type: Masonry Block on Pile Cap (Case 2 per Caltrans Standard Plan B15-3)

113 ft Barrier length

Minimum barrier height that achieves the noise reduction design goal.

Itemized Cost Estimate:			Barrier Height	6 ft		8 ft		10 ft		12 ft		14 ft		16 ft	
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**
090105	Time-Related Overhead (LS)	LS	Varies	1	$9,300	1	$10,200	1	$11,000	1	$12,000	1	$13,000	1	$14,200
130100	Job Site Management	LS	$6,000.00	1	$6,000	1	$6,000	1	$6,000	1	$6,000	1	$6,000	1	$6,000
170103	Clearing and Grubbing (LS)	LS	$300.00	1	$300	1	$300	1	$300	1	$300	1	$300	1	$300
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30)	LF	$150.00	93	$13,922	107	$16,041	122	$18,230	152	$22,750	182	$27,270	227	$34,050
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00	11.0	$16,479	11.0	$16,479	11.0	$16,479	11.0	$16,479	11.0	$16,479	11.0	$16,479
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72	1,573	$8,995	1,573	$8,995	1,581	$9,042	1,613	$9,228	1,646	$9,414	1,694	$9,692
582001	Soundwall (Masonry Block)	SQFT	$45.00	735	$33,053	961	$43,223	1,187	$53,393	1,413	$63,563	1,639	$73,733	1,865	$83,903
731502	Minor Concrete (Miscellaneous Construction)	CY	$2,200.00	4.2	$9,207	4	$9,207	4	$9,207	4	$9,207	4	$9,207	4	$9,207
803020	Remove Fence	LF	$15.00	113	$1,695	113	$1,695	113	$1,695	113	$1,695	113	$1,695	113	$1,695
210XXX	NPDES Erosion Control	LS	$5,000.00	1	$5,000	1	$5,000	1	$5,000	1	$5,000	1	$5,000	1	$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	2	$13,000	2	$13,000	2	$13,000	2	$13,000	2	$13,000	2	$13,000
	Traffic Control, Minor items, etc.	LS	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
	Grading around wall	LS	$5,000.00	1	$5,000	1	$5,000	1	$5,000	1	$5,000	1	$5,000	1	$5,000
	Landscaping Restoration	LS	$15,000.00	1	$15,000	1	$15,000	1	$15,000	1	$15,000	1	$15,000	1	$15,000
999990	Mobilization	LS	$16,000.00	1	$16,000	1	$16,000	1	$16,000	1	$16,000	1	$16,000	1	$16,000
	Permanent Footing Easement (2' wide)	LS	$7,000.00	1	$7,000	1	$7,000	1	$7,000	1	$7,000	1	$7,000	1	$7,000
	Temporary Construction Easement (5,420 SF)*	LS	$46,000.00	1	$46,000	1	$46,000	1	$46,000	1	$46,000	1	$46,000	1	$46,000
	Appraisal Fee (1 property)	EA	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
	Title Fee (1 property)	EA	$650.00	1	$650	1	$650	1	$650	1	$650	1	$650	1	$650
	Inspection Fee (1 property)	EA	$500.00	1	$500	1	$500	1	$500	1	$500	1	$500	1	$500
	Design Fee	LS	$7,000.00	1	$7,000	1	$7,000	1	$7,000	1	$7,000	1	$7,000	1	$7,000
			Estimated Barrier Cost		**$235,000**		**$248,000**		**$261,000**		**$277,000**		**$293,000**		**$311,000**
			Number of Benefitted Receptors		1		1		1		1		1		1
			Total Allowance for this sound wall		**$146,000**		**$146,000**		**$146,000**		**$146,000**		**$146,000**		**$146,000**
			Is the Construction Cost less than the Allowance?		**No**		**No**		**No**		**No**		**No**		**No**

* Includes access from the street, use of part of the drivethrough from limits of soundwall to drivethrough exit, and the outdoor playground area that would be closed during construction of the soundwall.

** Compensation for temporary loss of use of the outdoor playground area and the drivethrough of the restaurant has not been included. These are additional costs that would have to be determined and added.

22. BARRIER SW1789

Type: Masonry Block on Spread Footing (Case 2 per Caltrans Standard Plan B15-1)

164 ft Barrier length

Minimum barrier height that achieves the noise reduction design goal.

Itemized Cost Estimate:		Barrier Height	8 ft		10 ft		12 ft		14 ft		16 ft	
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**
090105	Time-Related Overhead (LS)	LS	Varies	1	$15,500	1	$16,900	1	$18,300	1	$19,900	1	$22,000
130100	Job Site Management	LS	$6,000.00	1	$6,000	1	$6,000	1	$6,000	1	$6,000	1	$6,000
170103	Clearing and Grubbing (LS)	LS	$7,400.00	1	$7,400	1	$7,400	1	$7,400	1	$7,400	1	$7,400
192001	Structure Excavation (2.2' deep x [footing width + 2'])*	CY	$155.00	93.5	$14,499	93.5	$14,499	93.5	$14,499	93.5	$14,499	93.5	$14,499
193001	Structure Backfill (structure excavation minus footing structural concrete)	CY	$160.00	63.2	$10,107	58.6	$9,378	54.1	$8,649	48.0	$7,678	41.9	$6,706
202038	Packet Fertilizer	EA	$8.00	35	$280	35	$280	35	$280	35	$280	35	$280
204038	Plant (Group U)	EA	$225.00	7	$1,575	7	$1,575	7	$1,575	7	$1,575	7	$1,575
204099	Plant Establishment Work	LS	$4,000.00	1	$4,000	1	$4,000	1	$4,000	1	$4,000	1	$4,000
205035	Wood Mulch	CY	$365.00	1.4	$511	1.4	$511	1	$511	1	$511	1	$511
510061	Structural Concrete, Soundwall (Spread Footing)*	CY	$1,500.00	30.4	$45,556	34.9	$52,389	39.5	$59,222	45.6	$68,333	51.6	$77,444
520101	Bar Reinforcing Steel (Spread Footing, Case 2)*	LB	$5.72	2,294	$13,123	2,341	$13,392	2,388	$13,662	2,459	$14,067	3,994	$22,844
582001	Soundwall (Masonry Block)	SQFT	$45.00	1,509	$67,896	1,837	$82,656	2,165	$97,416	2,493	$112,176	2,821	$126,936
600051A	Remove Wall	LF	$150.00	164	$24,600	164	$24,600	164	$24,600	164	$24,600	164	$24,600
210XXX	NPDES Erosion Control	LS	$5,000.00	1	$5,000	1	$5,000	1	$5,000	1	$5,000	1	$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	2	$13,000	2	$13,000	2	$13,000	2	$13,000	2	$13,000
	Traffic Control, Minor items, etc.	LS	$5,000.00	1	$5,000	1	$5,000	1	$5,000	1	$5,000	1	$5,000
	Landscaping Restoration	LS	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
999990	Mobilization	LS	$25,000.00	1	$25,000	1	$25,000	1	$25,000	1	$25,000	1	$25,000
	Permanent Footing Easement (width varies with height)*	LS	Varies	1	$16,400	1	$18,860	1	$21,320	1	$24,600	1	$27,880
	Temporary Construction Easement (2,590 SF)**	LS	$17,000.00	1	$17,000	1	$17,000	1	$17,000	1	$17,000	1	$17,000
	Appraisal Fee (1 property)	EA	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
	Title Fee (1 property)	EA	$650.00	1	$650	1	$650	1	$650	1	$650	1	$650
	Inspection Fee (1 property)	EA	$500.00	1	$500	1	$500	1	$500	1	$500	1	$500
	Design Fee	LS	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
			Estimated Barrier Cost		**$324,000**		**$349,000**		**$374,000**		**$402,000**		**$439,000**
			Number of Benefitted Receptors		1		1		1		1		1
			Total Allowance for this sound wall		**$146,000**		**$146,000**		**$146,000**		**$146,000**		**$146,000**
			Is the Construction Cost less than the Allowance?		**No**		**No**		**No**		**No**		**No**

* Due to proximity of slope on one side of the soundwall the case 2 spread footing has to be buried lower to provide minimum cover over the footing and the overall wall height increases by approximately 8 inches which requires using the footing width of the next design height

** Includes access from the street to the soundwall location, east portion of the driveway, the landscaped area along the soundwall, and the pool area which may require maintenance/cleaning during construction.

23. BARRIER SW1823

Type: Masonry Block on Pile Cap (Case 2 per Caltrans Standard Plan B15-3)

743 ft Barrier length

Minimum barrier height that achieves the noise reduction design goal.

Itemized Cost Estimate:			Barrier Height	10 ft		12 ft		14 ft		16 ft	
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**
090105	Time-Related Overhead (LS)	LS	Varies	1	$77,800	1	$84,500	1	$91,100	1	$98,700
130100	Job Site Management	LS	$8,000.00	1	$8,000	1	$8,000	1	$8,000	1	$8,000
170103	Clearing and Grubbing (LS)	LS	$16,500.00	1	$16,500	1	$16,500	1	$16,500	1	$16,500
190101	Roadway Excavation (temporary bench removal)	CY	$46.00	1,362.2	$62,660	1,362.2	$62,660	1,362.2	$62,660	1,362.2	$62,660
198010	Imported Borrow (temporary bench for CIDH pile rig installation access)	CY	$49.00	1,362.2	$66,746	1,362.2	$66,746	1,362.2	$66,746	1,362.2	$66,746
202038	Packet Fertilizer	EA	$8.00	75	$600	75	$600	75	$600	75	$600
204038	Plant (Group U)	EA	$225.00	15	$3,375	15	$3,375	15	$3,375	15	$3,375
204099	Plant Establishment Work	LS	$40,000.00	1	$40,000	1	$40,000	1	$40,000	1	$40,000
205035	Wood Mulch	CY	$365.00	3.0	$1,095	3.0	$1,095	3.0	$1,095	3.0	$1,095
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30)	LF	$150.00	794	$119,030	992	$148,750	1,190	$178,470	1,487	$223,050
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00	72.2	$108,354	72.2	$108,354	72.2	$108,354	72.2	$108,354
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72	10,394	$59,452	10,607	$60,674	10,821	$61,896	11,142	$63,730
582001	Soundwall (Masonry Block)	SQFT	$45.00	7,802	$351,068	9,288	$417,938	10,774	$484,808	12,260	$551,678
600051A	Remove Wall	LF	$150.00	743	$111,450	743	$111,450	743	$111,450	743	$111,450
731502	Minor Concrete (Miscellaneous Construction)(backyard concrete pads, sidewalk repairs)	CY	$2,200.00	28.5	$62,759	28.5	$62,759	28.5	$62,759	28.5	$62,759
210XXX	NPDES Erosion Control	LS	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	3	$19,500	3	$19,500	3	$19,500	3	$19,500
	Traffic Control, Minor items, etc.	LS	$20,000.00	1	$20,000	1	$20,000	1	$20,000	1	$20,000
	Remove Pilasters	EA	$1,000.00	6	$6,000	6	$6,000	6	$6,000	6	$6,000
	Small Storage Shed Replacement	EA	$3,000.00	2	$6,000	2	$6,000	2	$6,000	2	$6,000
	Landscaping Restoration	LS	$80,000.00	1	$80,000	1	$80,000	1	$80,000	1	$80,000
999990	Mobilization	LS	$135,000.00	1	$135,000	1	$135,000	1	$135,000	1	$135,000
	Permanent Footing Easement (2' wide)	LS	$34,000.00	1	$34,000	1	$34,000	1	$34,000	1	$34,000
	Temporary Construction Easement (19,777 SF)*	LS	$109,000.00	1	$109,000	1	$109,000	1	$109,000	1	$109,000
	Appraisal Fee (11 properties)	EA	$10,000.00	11	$110,000	1	$10,000	1	$10,000	1	$10,000
	Title Fee (11 properties)	EA	$650.00	11	$7,150	11	$7,150	11	$7,150	11	$7,150
	Inspection Fee (11 properties)	EA	$500.00	11	$5,500	11	$5,500	11	$5,500	11	$5,500
	Design Fee	LS	$54,000.00	1	$54,000	1	$54,000	1	$54,000	1	$54,000
			Estimated Barrier Cost		**$1,686,000**		**$1,690,000**		**$1,794,000**		**$1,915,000**
			Number of Benefitted Receptors		2		10		10		10
			Total Allowance for this sound wall		**$292,000**		**$1,460,000**		**$1,460,000**		**$1,460,000**
			Is the Construction Cost less than the Allowance?		**No**		**No**		**No**		**No**

* Includes 5' from the backyard of each private property plus the entire landscaped area on the street side for drill rig access/operations.

24. BARRIER SW1831

Type: Masonry Block on Pile Cap (Case 2 per Caltrans Standard Plan B15-3)

399 ft Barrier length

Minimum barrier height that achieves the noise reduction design goal.

Itemized Cost Estimate:		Barrier Height		8 ft		10 ft		12 ft		14 ft		16 ft	
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**
090105	Time-Related Overhead (LS)	LS	Varies	1	$27,700	1	$30,700	1	$34,200	1	$37,700	1	$41,900
130100	Job Site Management	LS	$6,000.00	1	$6,000	1	$6,000	1	$6,000	1	$6,000	1	$6,000
170103	Clearing and Grubbing (LS)	LS	$3,800.00	1	$3,800	1	$3,800	1	$3,800	1	$3,800	1	$3,800
202038	Packet Fertilizer	EA	$8.00	45	$360	45	$360	45	$360	45	$360	45	$360
204038	Plant (Group U)	EA	$225.00	9	$2,025	9	$2,025	9	$2,025	9	$2,025	9	$2,025
204099	Plant Establishment Work	LS	$25,000.00	1	$25,000	1	$25,000	1	$25,000	1	$25,000	1	$25,000
205035	Wood Mulch	CY	$365.00	1.8	$657	1.8	$657	1.8	$657	1.8	$657	1.8	$657
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30)	LF	$150.00	375	$56,259	427	$63,990	533	$79,950	639	$95,910	799	$119,850
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00	38.8	$58,188	38.8	$58,188	38.8	$58,188	38.8	$58,188	38.8	$58,188
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72	5,553	$31,762	5,582	$31,926	5,696	$32,583	5,811	$33,239	5,983	$34,224
582001	Soundwall (Masonry Block)	SQFT	$45.00	3,392	$152,618	4,190	$188,528	4,988	$224,438	5,786	$260,348	6,584	$296,258
803020	Remove Fence	LF	$15.00	399	$5,985	399	$5,985	399	$5,985	399	$5,985	399	$5,985
210XXX	NPDES Erosion Control	LS	$5,000.00	1	$5,000	1	$5,000	1	$5,000	1	$5,000	1	$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	2	$13,000	2	$13,000	2	$13,000	2	$13,000	2	$13,000
	Traffic Control, Minor items, etc.	LS	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
	Remove Pilasters	EA	$1,000.00	9	$9,000	9	$9,000	9	$9,000	9	$9,000	9	$9,000
	Landscaping Restoration	LS	$30,000.00	1	$30,000	1	$30,000	1	$30,000	1	$30,000	1	$30,000
999990	Mobilization	LS	$48,000.00	1	$48,000	1	$48,000	1	$48,000	1	$48,000	1	$48,000
	Permanent Footing Easement (2' wide)	LS	$18,000.00	1	$18,000	1	$18,000	1	$18,000	1	$18,000	1	$18,000
	Temporary Construction Easement (15' wide)*	LS	$39,000.00	1	$39,000	1	$39,000	1	$39,000	1	$39,000	1	$39,000
	Appraisal Fee (1 property)	EA	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
	Title Fee (1 property)	EA	$650.00	1	$650	1	$650	1	$650	1	$650	1	$650
	Inspection Fee (1 property)	EA	$500.00	1	$500	1	$500	1	$500	1	$500	1	$500
	Design Fee	LS	$20,000.00	1	$20,000	1	$20,000	1	$20,000	1	$20,000	1	$20,000
			Estimated Barrier Cost		**$574,000**		**$621,000**		**$677,000**		**$733,000**		**$798,000**
			Number of Benefitted Receptors		1		3		3		3		3
			Total Allowance for this sound wall		**$146,000**		**$438,000**		**$438,000**		**$438,000**		**$438,000**
			Is the Construction Cost less than the Allowance?		**No**		**No**		**No**		**No**		**No**

* Includes temporary access from local street on the side next to the channel for construction vehicle & drill rig.

25. BARRIER SW1833

Type: Masonry Block on Pile Cap (Case 2 per Caltrans Standard Plan B15-3)

205 ft Barrier length

Minimum barrier height that achieves the noise reduction design goal.

Itemized Cost Estimate:		Barrier Height	10 ft		12 ft		14 ft		16 ft	
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**
090105	Time-Related Overhead (LS)	LS	Varies	1	$25,600	1	$27,400	1	$29,200	1	$31,300
130100	Job Site Management	LS	$6,000.00	1	$6,000	1	$6,000	1	$6,000	1	$6,000
170103	Clearing and Grubbing (LS)	LS	$10,400.00	1	$10,400	1	$10,400	1	$10,400	1	$10,400
190101	Roadway Excavation (temporary bench removal)	CY	$46.00	262.6	$12,079	262.6	$12,079	262.6	$12,079	262.6	$12,079
198010	Imported Borrow (temporary bench for CIDH pile rig installation access)	CY	$49.00	262.6	$12,867	262.6	$12,867	262.6	$12,867	262.6	$12,867
202038	Packet Fertilizer	EA	$8.00	50	$400	50	$400	50	$400	50	$400
204038	Plant (Group U)	EA	$225.00	10	$2,250	10	$2,250	10	$2,250	10	$2,250
204099	Plant Establishment Work	LS	$20,000.00	1	$20,000	1	$20,000	1	$20,000	1	$20,000
205035	Wood Mulch	CY	$365.00	2.0	$730	2.0	$730	2.0	$730	2.0	$730
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30)	LF	$150.00	220	$32,950	274	$41,150	329	$49,350	411	$61,650
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00	19.9	$29,896	19.9	$29,896	19.9	$29,896	19.9	$29,896
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72	2,868	$16,403	2,927	$16,740	2,986	$17,078	3,074	$17,584
582001	Soundwall (Masonry Block)	SQFT	$45.00	2,153	$96,863	2,563	$115,313	2,973	$133,763	3,383	$152,213
600051A	Remove Wall	LF	$150.00	205	$30,750	205	$30,750	205	$30,750	205	$30,750
731502	Minor Concrete (Miscellaneous Construction)(backyard concrete pads, sidewalk repairs)	CY	$2,200.00	11.1	$24,420	11.1	$24,420	11.1	$24,420	11.1	$24,420
803020	Remove Fence	LF	$15.00	110	$1,650	110	$1,650	110	$1,650	110	$1,650
803110	Reconstruct Wood Fence	LF	$223.50	110	$24,585	110	$24,585	110	$24,585	110	$24,585
210XXX	NPDES Erosion Control	LS	$5,000.00	1	$5,000	1	$5,000	1	$5,000	1	$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	2	$13,000	2	$13,000	2	$13,000	2	$13,000
	Traffic Control, Minor items, etc.	LS	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000
	Remove Pilasters	EA	$1,000.00	3	$3,000	3	$3,000	3	$3,000	3	$3,000
	Small Storage Shed Replacement	EA	$5,000.00	1	$5,000	1	$5,000	1	$5,000	1	$5,000
	Landscaping Restoration	LS	$20,000.00	1	$20,000	1	$20,000	1	$20,000	1	$20,000
999990	Mobilization	LS	$43,000.00	1	$43,000	1	$43,000	1	$43,000	1	$43,000
	Permanent Footing Easement (2' wide)	LS	$12,000.00	1	$12,000	1	$12,000	1	$12,000	1	$12,000
	Temporary Construction Easement (5,100' SF)*	LS	$24,000.00	1	$24,000	1	$24,000	1	$24,000	1	$24,000
	Appraisal Fee (3 properties)	EA	$10,000.00	3	$30,000	3	$30,000	3	$30,000	3	$30,000
	Title Fee (3 properties)	EA	$650.00	3	$1,950	3	$1,950	3	$1,950	3	$1,950
	Inspection Fee (3 properties)	EA	$500.00	3	$1,500	3	$1,500	3	$1,500	3	$1,500
	Design Fee	LS	$18,000.00	1	$18,000	1	$18,000	1	$18,000	1	$18,000
			Estimated Barrier Cost		**$535,000**		**$564,000**		**$592,000**		**$626,000**
			Number of Benefitted Receptors		1		2		4		4
			Total Allowance for this sound wall		**$146,000**		**$292,000**		**$584,000**		**$584,000**
			Is the Construction Cost less than the Allowance?		**No**		**No**		**No**		**No**

* Includes 5' inside private properties, assumes construction vehicle and drill rig access/operations from Knabe Road and the maintenance road next to channel.

26. BARRIER SW1839

Type: Masonry Block on Pile Cap (Case 2 per Caltrans Standard Plan B15-3)

674 ft Barrier length

Minimum barrier height that achieves the noise reduction design goal.

Itemized Cost Estimate:		Barrier Height		10 ft		12 ft		14 ft		16 ft	
Code	Description	Unit	Unit Price	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost
090105	Time-Related Overhead (LS)	LS	Varies	1	$64,000	1	$70,000	1	$76,000	1	$83,000
130100	Job Site Management	LS	$8,000.00	1	$8,000	1	$8,000	1	$8,000	1	$8,000
170103	Clearing and Grubbing (LS)	LS	$29,300.00	1	$29,300	1	$29,300	1	$29,300	1	$29,300
202038	Packet Fertilizer	EA	$8.00	140	$1,120	140	$1,120	140	$1,120	140	$1,120
204038	Plant (Group U)	EA	$225.00	28	$6,300	28	$6,300	28	$6,300	28	$6,300
204099	Plant Establishment Work	LS	$30,000.00	1	$30,000	1	$30,000	1	$30,000	1	$30,000
205035	Wood Mulch	CY	$365.00	5.6	$2,044	5.6	$2,044	5.6	$2,044	5.6	$2,044
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30)	LF	$150.00	720	$107,990	900	$134,950	1,079	$161,910	1,349	$202,350
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00	65.5	$98,292	65.5	$98,292	65.5	$98,292	65.5	$98,292
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72	9,428	$53,931	9,622	$55,039	9,816	$56,148	10,107	$57,812
582001	Soundwall (Masonry Block)	SQFT	$45.00	7,077	$318,465	8,425	$379,125	9,773	$439,785	11,121	$500,445
600051A	Remove Wall	LF	$150.00	674	$101,100	674	$101,100	674	$101,100	674	$101,100
731502	Minor Concrete (Miscellaneous Construction)(backyard concrete pads, sidewalk repairs)	CY	$2,200.00	25.9	$56,899	25.9	$56,899	25.9	$56,899	25.9	$56,899
210XXX	NPDES Erosion Control	LS	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	3	$19,500	3	$19,500	3	$19,500	3	$19,500
	Traffic Control, Minor items, etc.	LS	$20,000.00	1	$20,000	1	$20,000	1	$20,000	1	$20,000
	Remove Pilasters	EA	$1,000.00	10	$10,000	10	$10,000	10	$10,000	10	$10,000
	Landscaping Restoration	LS	$75,000.00	1	$75,000	1	$75,000	1	$75,000	1	$75,000
999990	Mobilization	LS	$106,000.00	1	$106,000	1	$106,000	1	$106,000	1	$106,000
	Permanent Footing Easement (2' wide)	LS	$30,000.00	1	$30,000	1	$30,000	1	$30,000	1	$30,000
	Temporary Construction Easement (5' wide)*	LS	$26,000.00	1	$26,000	1	$26,000	1	$26,000	1	$26,000
	Appraisal Fee (5 properties)	EA	$10,000.00	5	$50,000	5	$50,000	5	$50,000	5	$50,000
	Title Fee (5 properties)	EA	$650.00	5	$3,250	5	$3,250	5	$3,250	5	$3,250
	Inspection Fee (5 properties)	EA	$500.00	5	$2,500	5	$2,500	5	$2,500	5	$2,500
	Design Fee	LS	$43,000.00	1	$43,000	1	$43,000	1	$43,000	1	$43,000
	Estimated Barrier Cost				**$1,273,000**		**$1,368,000**		**$1,463,000**		**$1,572,000**
	Number of Benefitted Receptors				1		3		3		7
	Total Allowance for this sound wall				**$146,000**		**$438,000**		**$438,000**		**$1,022,000**
	Is the Construction Cost less than the Allowance?				**No**		**No**		**No**		**No**

* Includes 5' inside private properties, assumes construction vehicle and drill rig access/operations from Knabe Road.

30. BARRIER SW1875

Type: Masonry Block on Pile Cap (Case 1 per Caltrans Standard Plan B15-3)

120 ft Barrier length

Minimum barrier height that achieves the noise reduction design goal.

Itemized Cost Estimate:			Barrier Height	6 ft		8 ft		10 ft		12 ft		14 ft		16 ft	
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**
090105	Time-Related Overhead (LS)	LS	Varies	1	$9,800	1	$10,600	1	$11,400	1	$12,200	1	$13,100	1	$13,900
130100	Job Site Management	LS	$6,000.00	1	$6,000	1	$6,000	1	$6,000	1	$6,000	1	$6,000	1	$6,000
153247	Remove Concrete (Miscellaneous)(CY)	CY	$400.00	7.40	$2,960	7.40	$2,960	7.40	$2,960	7.40	$2,960	7.40	$2,960	7.40	$2,960
170103	Clearing and Grubbing (LS)	LS	$3,300.00	1	$3,300	1	$3,300	1	$3,300	1	$3,300	1	$3,300	1	$3,300
202038	Packet Fertilizer	EA	$8.00	15	$120	15	$120	15	$120	15	$120	15	$120	15	$120
204038	Plant (Group U)	EA	$225.00	3	$675	3	$675	3	$675	3	$675	3	$675	3	$675
204099	Plant Establishment Work	LS	$4,000.00	1	$4,000	1	$4,000	1	$4,000	1	$4,000	1	$4,000	1	$4,000
205035	Wood Mulch	CY	$365.00	0.6	$219	0.6	$219	0.6	$219	0.6	$219	0.6	$219	0.6	$219
498016	16" Dia CIDH Concrete Piling (Case 1, Φ = 30)	LF	$150.00	57	$8,588	65	$9,713	72	$10,838	80	$11,963	95	$14,293	107	$16,073
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00	11.7	$17,500	11.7	$17,500	11.7	$17,500	11.7	$17,500	11.7	$17,500	11.7	$17,500
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72	1,670	$9,553	1,670	$9,553	1,670	$9,553	1,670	$9,553	1,689	$9,658	1,700	$9,723
582001	Soundwall (Masonry Block)	SQFT	$45.00	780	$35,100	1,020	$45,900	1,260	$56,700	1,500	$67,500	1,740	$78,300	1,980	$89,100
731502	Minor Concrete (Miscellaneous Construction)	CY	$2,200.00	7.4	$16,280	7.4	$16,280	7.4	$16,280	7.4	$16,280	7.4	$16,280	7.4	$16,280
803020	Remove Handrail	LF	$15.00	120	$1,800	120	$1,800	120	$1,800	120	$1,800	120	$1,800	120	$1,800
210XXX	NPDES Erosion Control	LS	$5,000.00	1	$5,000	1	$5,000	1	$5,000	1	$5,000	1	$5,000	1	$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	2	$13,000	2	$13,000	2	$13,000	2	$13,000	2	$13,000	2	$13,000
	Traffic Control, Minor items, etc.	LS	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
	Landscaping Restoration	LS	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
999990	Mobilization	LS	$16,000.00	1	$16,000	1	$16,000	1	$16,000	1	$16,000	1	$16,000	1	$16,000
	Permanent Footing Easement (2' wide)	LS	$6,000.00	1	$6,000	1	$6,000	1	$6,000	1	$6,000	1	$6,000	1	$6,000
	Temporary Construction Easement (13,150 SF)*	LS	$84,000.00	1	$84,000	1	$84,000	1	$84,000	1	$84,000	1	$84,000	1	$84,000
	Appraisal Fee (1 property)	EA	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
	Title Fee (1 property)	EA	$650.00	1	$650	1	$650	1	$650	1	$650	1	$650	1	$650
	Inspection Fee (1 property)	EA	$500.00	1	$500	1	$500	1	$500	1	$500	1	$500	1	$500
	Design Fee	LS	$7,000.00	1	$7,000	1	$7,000	1	$7,000	1	$7,000	1	$7,000	1	$7,000
			Estimated Barrier Cost		**$279,000**		**$291,000**		**$304,000**		**$317,000**		**$331,000**		**$344,000**
			Number of Benefitted Receptors		1		1		1		1		1		1
			Total Allowance for this sound wall		**$146,000**		**$146,000**		**$146,000**		**$146,000**		**$146,000**		**$146,000**
			Is the Construction Cost less than the Allowance?		**No**		**No**		**No**		**No**		**No**		**No**

* Includes portion of private driveway entrance for construction vehicle & drill rig access.

31. BARRIERS SW1890A + SW1890B COMBINATION

BARRIER SW1890A

Type: Masonry Block on Type 836S Barrier (Case 2 per Caltrans Standard Plan B15-6)

1550 ft Barrier length

Minimum barrier height that achieves the noise reduction design goal.

Itemized Cost Estimate:

		Barrier Height		10 ft		12 ft		14 ft	
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**
090105	Time-Related Overhead (LS)	LS	Varies	1	$154,400	1	$167,700	1	$181,600
130100	Job Site Management	LS	$8,000.00	1	$8,000	1	$8,000	1	$8,000
170103	Clearing and Grubbing (LS)	LS	$3,000.00	1	$3,000	1	$3,000	1	$3,000
192001	Structure Excavation (3.6' wide x 3' deep)	CY	$155.00	620	$96,100	620	$96,100	620	$96,100
193001	Structure Backfill (2' wide x 3' deep)	CY	$160.00	344	$55,111	344	$55,111	344	$55,111
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30, L = 16')	LF	$150.00	4,579	$686,919	4,961	$744,150	5,412	$811,786
510053	Structural Concrete, Bridge**	CY	$3,133.00	26	$81,458	26	$81,458	26	$81,458
510054	Structural Concrete, Bridge (Polymer Fiber)**	CY	$2,850.00	15	$42,750	15	$42,750	15	$42,750
510087	Structural Concrete, Approach Slab (Type R)**	CY	$2,140.00	6	$12,840	6	$12,840	6	$12,840
510081	Aggregate Base (Approach Slab)**	CY	$420.00	1	$420	1	$420	1	$420
510094	Structural Concrete, Drainage Inlet	CY	$5,450.00	3.2	$17,440	3.2	$17,440	3.2	$17,440
511106	Drill and Bond Dowel**	LF	$50.00	602	$30,100	602	$30,100	602	$30,100
519081	Joint Seal (MR 1/2")**	LF	$140.00	6	$840	6	$840	6	$840
520102	Bar Reinforcing Steel (Bridge)**	LB	$5.00	15,100	$75,500	15,100	$75,500	15,100	$75,500
582001	Soundwall (Masonry Block)	SQFT	$45.00	10,850	$488,250	13,950	$627,750	17,050	$767,250
600041	Furnish Polyester Concrete Overlay**	CF	$140.00	43	$6,020	43	$6,020	43	$6,020
600041	Place Polyester Concrete Overlay**	CF	$115.00	225	$25,875	225	$25,875	225	$25,875
600114	Bridge Removal (Portion)**	LS	$7,500.00	1	$7,500	1	$7,500	1	$7,500
650014	18" Reinforced Concrete Pipe	LF	$234.00	480	$112,320	480	$112,320	480	$112,320
690117	18" Corrugated Steel Pipe Downdrain (.079" thick)	LF	$272.00	98	$26,656	98	$26,656	98	$26,656
720110	Small-Rock Slope Protection	CY	$450.00	0.46	$208	0.46	$208	0.46	$208
750030	Inlet Frame and Grate	EA	$2,734.00	2	$5,468	2	$5,468	2	$5,468
832006	Midwest Guardrail System (Steel Post)	LF	$65.00	90	$5,850	90	$5,850	90	$5,850
832070	Vegetation Control (Minor Concrete)	SQYD	$200.00	50	$10,000	50	$10,000	50	$10,000
839543	Transition Railing (Type WB-31)	EA	$5,600.00	1	$5,600	1	$5,600	1	$5,600
839578	End Cap (Type TC)	EA	$500.00	1	$500	1	$500	1	$500
839584	Alternative In-Line Terminal System	EA	$7,500.00	1	$7,500	1	$7,500	1	$7,500
839741	Type 836S Barrier (Case 2, He=3')*	LF	$450.00	739	$332,550	739	$332,550	739	$332,550
839745	Concrete Barrier Transition	LF	$2,735.00	15	$41,025	15	$41,025	15	$41,025
839749	Concrete Barrier (Type 842 Modified)**	LF	$300.00	161	$48,300	161	$48,300	161	$48,300
839752	Remove Guardrail	LF	$12.00	100	$1,200	100	$1,200	100	$1,200
210XXX	NPDES Erosion Control	LS	$5,000.00	1	$5,000	1	$5,000	1	$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	4	$26,000	4	$26,000	4	$26,000
	Traffic Control, Minor items, etc.	LS	$20,000.00	1	$20,000	1	$20,000	1	$20,000
999990	Mobilization	LS	$283,000.00	1	$283,000	1	$283,000	1	$283,000
	Design Fee	LS	$113,000.00	1	$113,000	1	$113,000	1	$113,000
			Estimated Barrier Cost		$2,837,000		$3,047,000		$3,268,000

* Excludes the concrete barrier (161') for the segment of soundwall on bridge structure and the segment on top of a new retaining wall (650') proposed by the project, because the cost of the concrete barrier is already included in the cost for the retaining wall

** Items related to the bridge widening/modification needed to build the soundwall on the existing bridge structure.

BARRIER SW1890B

Type: Masonry Block on Type 836S Barrier (Case 2 per Caltrans Standard Plan B15-6)

1194 ft Barrier length

Itemized Cost Estimate:			**Barrier Height**	**10 ft**		**12 ft**		**14 ft**	
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**
090105	Time-Related Overhead (LS)	LS	Varies	1	$93,200	1	$108,200	1	$118,900
130100	Job Site Management	LS	$8,000.00	1	$8,000	1	$8,000	1	$8,000
170103	Clearing and Grubbing (LS)	LS	$3,400.00	1	$3,400	1	$3,400	1	$3,400
192001	Structure Excavation (3.6' wide x 3' deep)	CY	$155.00	478	$74,028	478	$74,028	478	$74,028
193001	Structure Backfill (2' wide x 3' deep)	CY	$160.00	265	$42,453	265	$42,453	265	$42,453
202038	Packet Fertilizer	EA	$8.00	15	$120	15	$120	15	$120
204038	Plant (Group U)	EA	$225.00	3	$675	3	$675	3	$675
204099	Plant Establishment Work	LS	$10,000.00	1	$10,000	1	$10,000	1	$10,000
205035	Wood Mulch	CY	$365.00	0.6	$219	0.6	$219	0.6	$219
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30, L = 16')	LF	$150.00	3,058	$458,646	3,822	$573,270	4,169	$625,372
510094	Structural Concrete, Drainage Inlet	CY	$5,450.00	3.2	$17,440	3.2	$17,440	3.2	$17,440
582001	Soundwall (Masonry Block)	SQFT	$45.00	8,358	$376,110	10,746	$483,570	13,134	$591,030
582002	Access Gate (Sound Wall)	EA	$10,000.00	1	$10,000	1	$10,000	1	$10,000
650014	18" Reinforced Concrete Pipe	LF	$234.00	45	$10,530	45	$10,530	45	$10,530
690117	18" Corrugated Steel Pipe Downdrain (.079" thick)	LF	$272.00	83	$22,576	83	$22,576	83	$22,576
720110	Small-Rock Slope Protection	CY	$450.00	1	$417	1	$417	1	$417
750030	Inlet Frame and Grate	EA	$2,734.00	2	$5,468	2	$5,468	2	$5,468
839601A	Crash Cushion (QuadGuard M10)	LF	$25,000.00	1	$25,000	1	$25,000	1	$25,000
839741	Type 836S Barrier (Case 1)*	LF	$240.00	792	$190,080	792	$190,080	792	$190,080
839745	Concrete Barrier Transition	LF	$2,735.00	5	$13,675	5	$13,675	5	$13,675
839752	Remove Guardrail	LF	$12.00	103	$1,236	103	$1,236	103	$1,236
210XXX	NPDES Erosion Control	LS	$5,000.00	1	$5,000	1	$5,000	1	$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	3	$19,500	3	$19,500	3	$19,500
	Traffic Control, Minor items, etc.	LS	$20,000.00	1	$20,000	1	$20,000	1	$20,000
	Plant Establishment	LS	$15,000.00	1	$15,000	1	$15,000	1	$15,000
	Relocate Ramp Light Pole	LS	$20,000.00	1	$20,000	1	$20,000	1	$20,000
	Relocate Ramp Metering Poles	LS	$30,000.00	1	$30,000	1	$30,000	1	$30,000
999990	Mobilization	LS	$186,000.00	1	$186,000	1	$186,000	1	$186,000
	Design Fee	LS	$75,000.00	1	$75,000	1	$75,000	1	$75,000
			Estimated Barrier Cost		$1,734,000		$1,971,000		$2,142,000

Estimated Barrier Combination Cost	**$4,571,000**	**$5,018,000**	**$5,410,000**
Number of Benefitted Receptors	12	45	65
Total Allowance for this sound wall	**$1,752,000**	**$6,570,000**	**$9,490,000**
Is the Construction Cost less than the Allowance?	**No**	**Yes**	**Yes**

* Excludes the concrete barrier (402') for the segment of soundwall on top of a new retaining wall proposed by the project, because the cost of the concrete barrier is already included in the cost for the retaining wall

32. BARRIERS SW1890A + SW1890C COMBINATION

BARRIER SW1890A

Type: Masonry Block on Type 836S Barrier (Case 2 per Caltrans Standard Plan B15-6)

1600 ft Barrier length

Minimum barrier height that achieves the noise reduction design goal.

Itemized Cost Estimate:			Barrier Height	8 ft		10 ft		12 ft		14 ft	
Code	Description	Unit	Unit Price	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost
090105	Time-Related Overhead (LS)	LS	Varies	1	$142,700	1	$158,800	1	$172,500	1	$186,900
130100	Job Site Management	LS	$8,000.00	1	$8,000	1	$8,000	1	$8,000	1	$8,000
170103	Clearing and Grubbing (LS)	LS	$3,100.00	1	$3,100	1	$3,100	1	$3,100	1	$3,100
192001	Structure Excavation (3.6' wide x 3' deep)	CY	$155.00	640	$99,200	640	$99,200	640	$99,200	640	$99,200
193001	Structure Backfill (2' wide x 3' deep)	CY	$160.00	356	$56,889	356	$56,889	356	$56,889	356	$56,889
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30, L = 16')	LF	$150.00	4,097	$614,550	4,727	$709,073	5,121	$768,150	5,586	$837,968
510053	Structural Concrete, Bridge**	CY	$3,133.00	26	$81,458	26	$81,458	26	$81,458	26	$81,458
510054	Structural Concrete, Bridge (Polymer Fiber)**	CY	$2,850.00	15	$42,750	15	$42,750	15	$42,750	15	$42,750
510081	Aggregate Base (Approach Slab)**	CY	$420.00	1	$420	1	$420	1	$420	1	$420
510087	Structural Concrete, Approach Slab (Type R)**	CY	$2,140.00	6	$12,840	6	$12,840	6	$12,840	6	$12,840
510094	Structural Concrete, Drainage Inlet	CY	$5,450.00	3.2	$17,440	3.2	$17,440	3.2	$17,440	3.2	$17,440
511106	Drill and Bond Dowel**	LF	$50.00	602	$30,100	602	$30,100	602	$30,100	602	$30,100
519081	Joint Seal (MR 1/2")**	LF	$140.00	6	$840	6	$840	6	$840	6	$840
520102	Bar Reinforcing Steel (Bridge)**	LB	$5.00	15,100	$75,500	15,100	$75,500	15,100	$75,500	15,100	$75,500
582001	Soundwall (Masonry Block)	SQFT	$45.00	8,000	$360,000	11,200	$504,000	14,400	$648,000	17,600	$792,000
600041	Furnish Polyester Concrete Overlay**	CF	$140.00	43	$6,020	43	$6,020	43	$6,020	43	$6,020
600041	Place Polyester Concrete Overlay**	CF	$115.00	225	$25,875	225	$25,875	225	$25,875	225	$25,875
600114	Bridge Removal (Portion)**	LS	$7,500.00	1	$7,500	1	$7,500	1	$7,500	1	$7,500
650014	18" Reinforced Concrete Pipe	LF	$234.00	480	$112,320	480	$112,320	480	$112,320	480	$112,320
690117	18" Corrugated Steel Pipe Downdrain (.079" thick)	LF	$272.00	98	$26,656	98	$26,656	98	$26,656	98	$26,656
720110	Small-Rock Slope Protection	CY	$450.00	0.46	$208	0.46	$208	0.46	$208	0.46	$208
750030	Inlet Frame and Grate	EA	$2,734.00	2	$5,468	2	$5,468	2	$5,468	2	$5,468
832006	Midwest Guardrail System (Steel Post)	LF	$65.00	90	$5,850	90	$5,850	90	$5,850	90	$5,850
832070	Vegetation Control (Minor Concrete)	SQYD	$200.00	50	$10,000	50	$10,000	50	$10,000	50	$10,000
839543	Transition Railing (Type WB-31)	EA	$5,600.00	1	$5,600	1	$5,600	1	$5,600	1	$5,600
839578	End Cap (Type TC)	EA	$500.00	1	$500	1	$500	1	$500	1	$500
839584	Alternative In-Line Terminal System	EA	$7,500.00	1	$7,500	1	$7,500	1	$7,500	1	$7,500
839741	Type 836S Barrier (Case 2, He=3')*	LF	$450.00	789	$355,050	789	$355,050	789	$355,050	789	$355,050
839745	Concrete Barrier Transition	LF	$2,735.00	15	$41,025	15	$41,025	15	$41,025	15	$41,025
839749	Concrete Barrier (Type 842 Modified)**	LF	$300.00	161	$48,300	161	$48,300	161	$48,300	161	$48,300
839752	Remove Guardrail	LF	$12.00	100	$1,200	100	$1,200	100	$1,200	100	$1,200
210XXX	NPDES Erosion Control	LS	$5,000.00	1	$5,000	1	$5,000	1	$5,000	1	$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	4	$26,000	4	$26,000	4	$26,000	4	$26,000
	Traffic Control, Minor items, etc.	LS	$20,000.00	1	$20,000	1	$20,000	1	$20,000	1	$20,000
999990	Mobilization	LS	$293,000.00	1	$293,000	1	$293,000	1	$293,000	1	$293,000
	Design Fee	LS	$117,000.00	1	$117,000	1	$117,000	1	$117,000	1	$117,000
			Estimated Barrier Cost		$2,666,000		$2,921,000		$3,138,000		$3,366,000

* Excludes the concrete barrier (161') for the segment soundwall on bridge structure and the segment on top of a new retaining wall (650') proposed by the project, because the cost of the concrete barrier is already included in the cost for the retaining wall

** Items related to the bridge widening/modification needed to build the soundwall on the existing bridge structure.

BARRIER SW1890C

Type: Masonry Block on Type 836S Barrier (Case 2 per Caltrans Standard Plan B15-6) within CRZ, and on Pile Cap (Case 2) along R/W.
1388 ft Barrier Length
759 ft Barrier length on Pile Cap
80 ft Barrier length on Type 836S Barrier

Itemized Cost Estimate:

			Barrier Height	8 ft		10 ft		12 ft		14 ft		16 ft		18 ft		20 ft	
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**
090105	Time-Related Overhead (LS)	LS	Varies	1	$58,000	1	$67,700	1	$78,500	1	$89,300	1	$101,200	1	$109,600	1	$118,100
130100	Job Site Management	LS	$8,000.00	1	$8,000	1	$8,000	1	$8,000	1	$8,000	1	$8,000	1	$8,000	1	$8,000
170103	Clearing and Grubbing (LS)	LS	$5,700.00	1	$5,700	1	$5,700	1	$5,700	1	$5,700	1	$5,700	1	$5,700	1	$5,700
194001	Ditch Excavation	CY	$484.00	10	$4,840	10	$4,840	10	$4,840	10	$4,840	10	$4,840	10	$4,840	10	$4,840
202038	Packet Fertilizer	EA	$8.00	45	$360	45	$360	45	$360	45	$360	45	$360	45	$360	45	$360
204038	Plant (Group U)	EA	$225.00	9	$2,025	9	$2,025	9	$2,025	9	$2,025	9	$2,025	9	$2,025	9	$2,025
204099	Plant Establishment Work	LS	$20,000.00	1	$20,000	1	$20,000	1	$20,000	1	$20,000	1	$20,000	1	$20,000	1	$20,000
205035	Wood Mulch	CY	$365.00	1.8	$657	1.8	$657	1.8	$657	1.8	$657	1.8	$657	1.8	$657	1.8	$657
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30)(for pile cap)	LF	$150.00	713	$106,884	811	$121,590	1,013	$151,950	1,215	$182,310	1,519	$227,850	1,519	$227,850	1,519	$227,850
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00	73.8	$110,688	73.8	$110,688	73.8	$110,688	73.8	$110,688	73.8	$110,688	73.8	$110,688	73.8	$110,688
510094	Structural Concrete, Drainage Inlet	CY	$5,450.00	1.6	$8,720	1.6	$8,720	1.6	$8,720	1.6	$8,720	1.6	$8,720	1.6	$8,720	1.6	$8,720
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72	10,563	$60,420	10,617	$60,732	10,836	$61,981	11,054	$63,229	11,382	$65,102	11,382	$65,102	11,382	$65,102
192001	Structure Excavation - for Concrete Barrier (3.6' wide x 3' deep)	CY	$155.00	32	$4,960	32	$4,960	32	$4,960	32	$4,960	32	$4,960	32	$4,960	32	$4,960
193001	Structure Backfill - for Concrete Barrier (2' wide x 3' deep)	CY	$160.00	18	$2,844	18	$2,844	18	$2,844	18	$2,844	18	$2,844	18	$2,844	18	$2,844
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30, L = 16')(for concrete barrier)	LF	$150.00	206	$30,870	237	$35,596	257	$38,550	280	$42,041	308	$46,230	308	$46,230	308	$46,230
582001	Soundwall (Masonry Block)	SQFT	$45.00	6,940	$312,300	9,716	$437,220	12,492	$562,140	15,268	$687,060	18,044	$811,980	20,820	$936,900	23,596	$1,061,820
582002	Access Gate (Sound Wall)	EA	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
690117	18" Corrugated Steel Pipe Downdrain (.079" thick)	LF	$272.00	83	$22,576	83	$22,576	83	$22,576	83	$22,576	83	$22,576	83	$22,576	83	$22,576
710190	Relocate Overside Drain	LF	$450.00	0.46	$208	0.46	$208	0.46	$208	0.46	$208	0.46	$208	0.46	$208	0.46	$208
721420	Concrete (Ditch Lining)	CY	$1,400.00	9	$12,600	9	$12,600	9	$12,600	9	$12,600	9	$12,600	9	$12,600	9	$12,600
750030	Inlet Frame and Grate	EA	$2,734.00	1	$2,734	1	$2,734	1	$2,734	1	$2,734	1	$2,734	1	$2,734	1	$2,734
839741	Type 836S Barrier (Case 2, He=3')*	LF	$450.00	80	$36,000	80	$36,000	80	$36,000	80	$36,000	80	$36,000	80	$36,000	80	$36,000
210XXX	NPDES Erosion Control	LS	$5,000.00	1	$5,000	1	$5,000	1	$5,000	1	$5,000	1	$5,000	1	$5,000	1	$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	3	$19,500	3	$19,500	3	$19,500	3	$19,500	3	$19,500	3	$19,500	3	$19,500
	Traffic Control, Minor items, etc.	LS	$20,000.00	1	$20,000	1	$20,000	1	$20,000	1	$20,000	1	$20,000	1	$20,000	1	$20,000
	Relocate Ramp Light Pole	LS	$20,000.00	1	$20,000	1	$20,000	1	$20,000	1	$20,000	1	$20,000	1	$20,000	1	$20,000
	Relocate Ramp Metering Poles	LS	$30,000.00	1	$30,000	1	$30,000	1	$30,000	1	$30,000	1	$30,000	1	$30,000	1	$30,000
999990	Mobilization	LS	$167,000.00	1	$167,000	1	$167,000	1	$167,000	1	$167,000	1	$167,000	1	$167,000	1	$167,000
	Design Fee	LS	$67,000.00	1	$67,000	1	$67,000	1	$67,000	1	$67,000	1	$67,000	1	$67,000	1	$67,000
			Estimated Barrier Cost		$1,150,000		$1,305,000		$1,475,000		$1,646,000		$1,834,000		$1,968,000		$2,101,000
			Estimated Barrier Combination Cost		**$3,816,000**		**$4,226,000**		**$4,613,000**		**$5,012,000**		**$5,200,000**		**$5,334,000**		**$5,467,000**
			Number of Benefitted Receptors		7		31		70		85		92		98		109
			Total Allowance for this sound wall		**$1,022,000**		**$4,526,000**		**$10,220,000**		**$12,410,000**		**$13,432,000**		**$14,308,000**		**$15,914,000**
			Is the Construction Cost less than the Allowance?		**No**		**Yes**		**Yes**		**Yes**		**Yes**		**Yes**		**Yes**

* Excludes the concrete barrier (370') for the segment of soundwall on top of a new retaining wall proposed by the project, because the cost of the concrete barrier is already included in the cost for the retaining wall

33. BARRIER SW1895

Type: Masonry Block on Pile Cap (Case 2 per Caltrans Standard Plan B15-3)

63 ft Barrier length

Minimum barrier height that achieves the noise reduction design goal.

Itemized Cost Estimate:			Barrier Height	6 ft		8 ft		10 ft		12 ft		14 ft		16 ft	
Code	Description	Unit	Unit Price	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost
090105	Time-Related Overhead (LS)	LS	Varies	1	$5,800	1	$6,200	1	$6,700	1	$7,300	1	$7,800	1	$8,500
130100	Job Site Management	LS	$6,000.00	1	$6,000	1	$6,000	1	$6,000	1	$6,000	1	$6,000	1	$6,000
170103	Clearing and Grubbing (LS)	LS	$200.00	1	$200	1	$200	1	$200	1	$200	1	$200	1	$200
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30)	LF	$150.00	52	$7,828	60	$9,009	68	$10,230	85	$12,750	102	$15,270	127	$19,050
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00	6.1	$9,188	6.1	$9,188	6.1	$9,188	6.1	$9,188	6.1	$9,188	6.1	$9,188
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72	877	$5,015	877	$5,015	881	$5,041	899	$5,145	918	$5,248	945	$5,404
582001	Soundwall (Masonry Block)	SQFT	$45.00	410	$18,428	536	$24,098	662	$29,768	788	$35,438	914	$41,108	1,040	$46,778
210XXX	NPDES Erosion Control	LS	$5,000.00	1	$5,000	1	$5,000	1	$5,000	1	$5,000	1	$5,000	1	$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	2	$13,000	2	$13,000	2	$13,000	2	$13,000	2	$13,000	2	$13,000
	Traffic Control, Minor items, etc.	LS	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
	Landscaping Restoration	LS	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
999990	Mobilization	LS	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
	Permanent Footing Easement (2' wide)	LS	$3,000.00	1	$3,000	1	$3,000	1	$3,000	1	$3,000	1	$3,000	1	$3,000
	Temporary Construction Easement (24,240 SF)*	LS	$150,000.00	1	$150,000	1	$150,000	1	$150,000	1	$150,000	1	$150,000	1	$150,000
	Appraisal Fee (1 property)	EA	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
	Title Fee (1 property)	EA	$650.00	1	$650	1	$650	1	$650	1	$650	1	$650	1	$650
	Inspection Fee (1 property)	EA	$500.00	1	$500	1	$500	1	$500	1	$500	1	$500	1	$500
	Design Fee	LS	$4,000.00	1	$4,000	1	$4,000	1	$4,000	1	$4,000	1	$4,000	1	$4,000
			Estimated Barrier Cost		**$269,000**		**$276,000**		**$284,000**		**$293,000**		**$301,000**		**$312,000**
			Number of Benefitted Receptors		1		1		1		1		1		1
			Total Allowance for this sound wall		**$146,000**		**$146,000**		**$146,000**		**$146,000**		**$146,000**		**$146,000**
			Is the Construction Cost less than the Allowance?		**No**		**No**		**No**		**No**		**No**		**No**

* Includes temporary access from nearest public street through private road for construction vehicle & drill rig.

34. BARRIER SW1899

Type: Masonry Block on Pile Cap (Case 2 per Caltrans Standard Plan B15-3)

48 ft Barrier length

Minimum barrier height that achieves the noise reduction design goal.

Itemized Cost Estimate:			Barrier Height	6 ft		8 ft		10 ft		12 ft		14 ft		16 ft	
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**
090105	Time-Related Overhead (LS)	LS	Varies	1	$12,400	1	$12,700	1	$13,100	1	$13,500	1	$13,900	1	$14,400
130100	Job Site Management	LS	$6,000.00	1	$6,000	1	$6,000	1	$6,000	1	$6,000	1	$6,000	1	$6,000
153247	Remove Concrete (Miscellaneous)(CY)	CY	$400.00	1.20	$480	1.20	$480	1.20	$480	1.20	$480	1.20	$480	1.20	$480
170103	Clearing and Grubbing (LS)	LS	$1,100.00	1	$1,100	1	$1,100	1	$1,100	1	$1,100	1	$1,100	1	$1,100
202038	Packet Fertilizer	EA	$8.00	5	$40	5	$40	5	$40	5	$40	5	$40	5	$40
204038	Plant (Group U)	EA	$225.00	1	$225	1	$225	1	$225	1	$225	1	$225	1	$225
204099	Plant Establishment Work	LS	$3,000.00	1	$3,000	1	$3,000	1	$3,000	1	$3,000	1	$3,000	1	$3,000
205035	Wood Mulch	CY	$365.00	0.2	$73	0.2	$73	0.2	$73	0.2	$73	0.2	$73	0.2	$73
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30)	LF	$150.00	40	$6,000	46	$6,900	52	$7,830	65	$9,750	78	$11,670	97	$14,550
510060	Structural Concrete, Retaining Wall	CY	$1,680.00	44.4	$74,592	44	$74,592	44	$74,592	44	$74,592	44	$74,592	44	$74,592
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00	4.7	$7,000	4.7	$7,000	4.7	$7,000	4.7	$7,000	4.7	$7,000	4.7	$7,000
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72	668	$3,821	668	$3,821	671	$3,841	685	$3,920	699	$3,999	720	$4,117
520103	Bar Reinforcing Steel (Retaining Wall)	LB	$5.72	5,168	$29,562	5,168	$29,562	5,168	$29,562	5,168	$29,562	5,168	$29,562	5,168	$29,562
582001	Soundwall (Masonry Block)	SQFT	$45.00	312	$14,040	408	$18,360	504	$22,680	600	$27,000	696	$31,320	792	$35,640
731502	Minor Concrete (Miscellaneous Construction)	CY	$2,200.00	1.2	$2,640	1.2	$2,640	1.2	$2,640	1.2	$2,640	1.2	$2,640	1.2	$2,640
803020	Remove Fence	LF	$15.00	79	$1,185	79	$1,185	79	$1,185	79	$1,185	79	$1,185	79	$1,185
210XXX	NPDES Erosion Control	LS	$5,000.00	1	$5,000	1	$5,000	1	$5,000	1	$5,000	1	$5,000	1	$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	2	$13,000	2	$13,000	2	$13,000	2	$13,000	2	$13,000	2	$13,000
	Traffic Control, Minor items, etc.	LS	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
	Landscaping Restoration	LS	$5,000.00	1	$5,000	1	$5,000	1	$5,000	1	$5,000	1	$5,000	1	$5,000
999990	Mobilization	LS	$20,000.00	1	$20,000	1	$20,000	1	$20,000	1	$20,000	1	$20,000	1	$20,000
	Permanent Footing Easement (2' wide)	LS	$3,000.00	1	$3,000	1	$3,000	1	$3,000	1	$3,000	1	$3,000	1	$3,000
	Temporary Construction Easement (29,400 SF)*	LS	$181,000.00	1	$181,000	1	$181,000	1	$181,000	1	$181,000	1	$181,000	1	$181,000
	Appraisal Fee (1 property)	EA	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
	Title Fee (1 property)	EA	$650.00	1	$650	1	$650	1	$650	1	$650	1	$650	1	$650
	Inspection Fee (1 property)	EA	$500.00	1	$500	1	$500	1	$500	1	$500	1	$500	1	$500
	Design Fee	LS	$8,000.00	1	$8,000	1	$8,000	1	$8,000	1	$8,000	1	$8,000	1	$8,000
			Estimated Barrier Cost		**$419,000**		**$424,000**		**$430,000**		**$437,000**		**$443,000**		**$451,000**
			Number of Benefitted Receptors		1		1		1		1		1		1
			Total Allowance for this sound wall		**$146,000**		**$146,000**		**$146,000**		**$146,000**		**$146,000**		**$146,000**
			Is the Construction Cost less than the Allowance?		**No**		**No**		**No**		**No**		**No**		**No**

* Includes temporary access from nearest public street through private road for construction vehicle & drill rig.

36. BARRIER SW1905

Type: Masonry Block on Pile Cap (Case 1 per Caltrans Standard Plan B15-3)

61 ft Barrier length

Minimum barrier height that achieves the noise reduction design goal.

Itemized Cost Estimate:

			Barrier Height	8 ft		10 ft		12 ft		14 ft		16 ft	
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**
090105	Time-Related Overhead (LS)	LS	Varies	1	$13,500	1	$13,900	1	$14,300	1	$14,700	1	$15,200
130100	Job Site Management	LS	$6,000.00	1	$6,000	1	$6,000	1	$6,000	1	$6,000	1	$6,000
153247	Remove Concrete (Miscellaneous)(CY)	CY	$400.00	3.4	$1,356	3.39	$1,356	3.39	$1,356	3.39	$1,356	3.39	$1,356
170103	Clearing and Grubbing (LS)	LS	$200.00	1	$200	1	$200	1	$200	1	$200	1	$200
498016	16" Dia CIDH Concrete Piling (Case 1, Φ = 30)	LF	$150.00	33	$5,011	37	$5,583	41	$6,155	49	$7,339	55	$8,244
510060	Structural Concrete, Retaining Wall	CY	$1,680.00	39	$65,520	39	$65,520	39	$65,520	39	$65,520	39	$65,520
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00	5.9	$8,896	5.9	$8,896	5.9	$8,896	5.9	$8,896	5.9	$8,896
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72	849	$4,856	849	$4,856	849	$4,856	858	$4,910	864	$4,943
520103	Bar Reinforcing Steel (Retaining Wall)	LB	$5.72	4,540	$25,967	4,540	$25,967	4,540	$25,967	4,540	$25,967	4,540	$25,967
582001	Soundwall (Masonry Block)	SQFT	$45.00	519	$23,333	641	$28,823	763	$34,313	885	$39,803	1,007	$45,293
600017	Remove Retaining Wall (LF)	LF	$200.00	61	$12,200	61	$12,200	61	$12,200	61	$12,200	61	$12,200
731502	Minor Concrete (Miscellaneous Construction)	CY	$2,200.00	3.4	$7,456	3.4	$7,456	3.4	$7,456	3.4	$7,456	3.4	$7,456
210XXX	NPDES Erosion Control	LS	$5,000.00	1	$5,000	1	$5,000	1	$5,000	1	$5,000	1	$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	2	$13,000	2	$13,000	2	$13,000	2	$13,000	2	$13,000
	Traffic Control, Minor items, etc.	LS	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
	Landscaping Restoration	LS	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
999990	Mobilization	LS	$22,000.00	1	$22,000	1	$22,000	1	$22,000	1	$22,000	1	$22,000
	Permanent Footing Easement (2' wide)	LS	$3,000.00	1	$3,000	1	$3,000	1	$3,000	1	$3,000	1	$3,000
	Temporary Construction Easement (6,200 SF)*	LS	$39,000.00	1	$39,000	1	$39,000	1	$39,000	1	$39,000	1	$39,000
	Appraisal Fee (1 property)	EA	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
	Title Fee (1 property)	EA	$650.00	1	$650	1	$650	1	$650	1	$650	1	$650
	Inspection Fee (1 property)	EA	$500.00	1	$500	1	$500	1	$500	1	$500	1	$500
	Design Fee	LS	$9,000.00	1	$9,000	1	$9,000	1	$9,000	1	$9,000	1	$9,000
			Estimated Barrier Cost		**$297,000**		**$303,000**		**$310,000**		**$317,000**		**$324,000**
			Number of Benefitted Receptors		1		1		1		1		1
			Total Allowance for this sound wall		**$146,000**		**$146,000**		**$146,000**		**$146,000**		**$146,000**
			Is the Construction Cost less than the Allowance?		**No**		**No**		**No**		**No**		**No**

* Includes temporary access from local street and private driveway for construction vehicle & drill rig.

37. BARRIER SW1907

Type: Masonry Block on Pile Cap (Case 2 per Caltrans Standard Plan B15-3)

78 ft Barrier length

Minimum barrier height that achieves the noise reduction design goal.

Itemized Cost Estimate:		Barrier Height		6 ft		8 ft		10 ft		12 ft		14 ft		16 ft	
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**
090105	Time-Related Overhead (LS)	LS	Varies	1	$16,500	1	$17,100	1	$17,700	1	$18,400	1	$19,100	1	$19,900
130100	Job Site Management	LS	$6,000.00	1	$6,000	1	$6,000	1	$6,000	1	$6,000	1	$6,000	1	$6,000
153247	Remove Concrete (Miscellaneous)(CY)	CY	$400.00	4.3	$1,733	4.3	$1,733	4.3	$1,733	4.3	$1,733	4.3	$1,733	4.3	$1,733
170103	Clearing and Grubbing (LS)	LS	$2,200.00	1	$2,200	1	$2,200	1	$2,200	1	$2,200	1	$2,200	1	$2,200
202038	Packet Fertilizer	EA	$8.00	10	$80	10	$80	10	$80	10	$80	10	$80	10	$80
204038	Plant (Group U)	EA	$225.00	2	$450	2	$450	2	$450	2	$450	2	$450	2	$450
204099	Plant Establishment Work	LS	$3,000.00	1	$3,000	1	$3,000	1	$3,000	1	$3,000	1	$3,000	1	$3,000
205035	Wood Mulch	CY	$365.00	0.4	$146	0.4	$146	0.4	$146	0.4	$146	0.4	$146	0.4	$146
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30)	LF	$150.00	64	$9,656	74	$11,119	84	$12,630	105	$15,750	126	$18,870	157	$23,550
510060	Structural Concrete, Retaining Wall	CY	$1,680.00	50	$84,000	50	$84,000	50	$84,000	50	$84,000	50	$84,000	50	$84,000
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00	7.6	$11,375	7.6	$11,375	7.6	$11,375	7.6	$11,375	7.6	$11,375	7.6	$11,375
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72	1,086	$6,209	1,086	$6,209	1,091	$6,241	1,114	$6,370	1,136	$6,498	1,170	$6,690
520103	Bar Reinforcing Steel (Retaining Wall)	LB	$5.72	5,820	$33,290	5,820	$33,290	5,820	$33,290	5,820	$33,290	5,820	$33,290	5,820	$33,290
582001	Soundwall (Masonry Block)	SQFT	$45.00	507	$22,815	663	$29,835	819	$36,855	975	$43,875	1,131	$50,895	1,287	$57,915
600017	Remove Retaining Wall (LF)	LF	$200.00	78	$15,600	78	$15,600	78	$15,600	78	$15,600	78	$15,600	78	$15,600
731502	Minor Concrete (Miscellaneous Construction)	CY	$2,200.00	4.3	$9,533	4.3	$9,533	4.3	$9,533	4.3	$9,533	4.3	$9,533	4.3	$9,533
210XXX	NPDES Erosion Control	LS	$5,000.00	1	$5,000	1	$5,000	1	$5,000	1	$5,000	1	$5,000	1	$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	2	$13,000	2	$13,000	2	$13,000	2	$13,000	2	$13,000	2	$13,000
	Traffic Control, Minor items, etc.	LS	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
	Landscaping Restoration	LS	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
999990	Mobilization	LS	$27,000.00	1	$27,000	1	$27,000	1	$27,000	1	$27,000	1	$27,000	1	$27,000
	Permanent Footing Easement (2' wide)	LS	$4,000.00	1	$4,000	1	$4,000	1	$4,000	1	$4,000	1	$4,000	1	$4,000
	Temporary Construction Easement (5,400 SF)*	LS	$34,000.00	1	$34,000	1	$34,000	1	$34,000	1	$34,000	1	$34,000	1	$34,000
	Appraisal Fee (1 property)	EA	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
	Title Fee (1 property)	EA	$650.00	1	$650	1	$650	1	$650	1	$650	1	$650	1	$650
	Inspection Fee (1 property)	EA	$500.00	1	$500	1	$500	1	$500	1	$500	1	$500	1	$500
	Design Fee	LS	$11,000.00	1	$11,000	1	$11,000	1	$11,000	1	$11,000	1	$11,000	1	$11,000
	Estimated Barrier Cost				**$348,000**		**$357,000**		**$366,000**		**$377,000**		**$388,000**		**$401,000**
	Number of Benefitted Receptors				1		1		1		1		1		1
	Total Allowance for this sound wall				**$146,000**		**$146,000**		**$146,000**		**$146,000**		**$146,000**		**$146,000**
	Is the Construction Cost less than the Allowance?				**No**		**No**		**No**		**No**		**No**		**No**

* Includes temporary access from local street and private driveway for construction vehicle & drill rig.

39. BARRIER SW1913

Type: Masonry Block on Pile Cap (Case 1 per Caltrans Standard Plan B15-3)

172 ft Barrier length

Minimum barrier height that achieves the noise reduction design goal.

Itemized Cost Estimate:			Barrier Height	6 ft		8 ft		10 ft		12 ft		14 ft		16 ft	
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**
090105	Time-Related Overhead (LS)	LS	Varies	1	$50,700	1	$51,800	1	$53,000	1	$54,100	1	$55,400	1	$56,600
130100	Job Site Management	LS	$6,000.00	1	$6,000	1	$6,000	1	$6,000	1	$6,000	1	$6,000	1	$6,000
153247	Remove Concrete (Miscellaneous)(CY)	CY	$400.00	516.00	$206,400	516.00	$206,400	516.00	$206,400	516.00	$206,400	516.00	$206,400	516.00	$206,400
170103	Clearing and Grubbing (LS)	LS	$3,400.00	1	$3,400	1	$3,400	1	$3,400	1	$3,400	1	$3,400	1	$3,400
202038	Packet Fertilizer	EA	$8.00	15	$120	15	$120	15	$120	15	$120	15	$120	15	$120
204038	Plant (Group U)	EA	$225.00	3	$675	3	$675	3	$675	3	$675	3	$675	3	$675
204099	Plant Establishment Work	LS	$3,000.00	1	$3,000	1	$3,000	1	$3,000	1	$3,000	1	$3,000	1	$3,000
205035	Wood Mulch	CY	$365.00	0.6	$219	0.6	$219	0.6	$219	0.6	$219	0.6	$219	0.6	$219
498016	16" Dia CIDH Concrete Piling (Case 1, Φ = 30)	LF	$150.00	82	$12,244	92	$13,856	103	$15,469	114	$17,081	136	$20,421	153	$22,973
510060	Structural Concrete, Retaining Wall	CY	$1,680.00	112	$188,160	112	$188,160	112	$188,160	112	$188,160	112	$188,160	112	$188,160
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00	16.7	$25,083	16.7	$25,083	16.7	$25,083	16.7	$25,083	16.7	$25,083	16.7	$25,083
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72	2,394	$13,692	2,394	$13,692	2,394	$13,692	2,394	$13,692	2,420	$13,844	2,437	$13,937
520103	Bar Reinforcing Steel (Retaining Wall)	LB	$5.72	13,037	$74,570	13,037	$74,570	13,037	$74,570	13,037	$74,570	13,037	$74,570	13,037	$74,570
582001	Soundwall (Masonry Block)	SQFT	$45.00	1,118	$50,310	1,462	$65,790	1,806	$81,270	2,150	$96,750	2,494	$112,230	2,838	$127,710
600017	Remove Retaining Wall (LF)	LF	$200.00	172	$34,400	172	$34,400	172	$34,400	172	$34,400	172	$34,400	172	$34,400
731519	Minor Concrete (Stamped Concrete)	SQFT	$55.00	516	$28,380	516	$28,380	516	$28,380	516	$28,380	516	$28,380	516	$28,380
210XXX	NPDES Erosion Control	LS	$5,000.00	1	$5,000	1	$5,000	1	$5,000	1	$5,000	1	$5,000	1	$5,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	2	$13,000	2	$13,000	2	$13,000	2	$13,000	2	$13,000	2	$13,000
	Traffic Control, Minor items, etc.	LS	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
	Demolish Building Structure	LS	$15,000.00	1	$15,000	1	$15,000	1	$15,000	1	$15,000	1	$15,000	1	$15,000
	Reconstruct Building Structure	LS	$50,000.00	1	$50,000	1	$50,000	1	$50,000	1	$50,000	1	$50,000	1	$50,000
	Landscaping Restoration	LS	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
999990	Mobilization	LS	$81,000.00	1	$81,000	1	$81,000	1	$81,000	1	$81,000	1	$81,000	1	$81,000
	Permanent Footing Easement (2' wide)	LS	$8,000.00	1	$8,000	1	$8,000	1	$8,000	1	$8,000	1	$8,000	1	$8,000
	Temporary Construction Easement (14,400 SF)*	LS	$89,000.00	1	$89,000	1	$89,000	1	$89,000	1	$89,000	1	$89,000	1	$89,000
	Appraisal Fee (1 property)	EA	$10,000.00	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000	1	$10,000
	Title Fee (1 property)	EA	$650.00	1	$650	1	$650	1	$650	1	$650	1	$650	1	$650
	Inspection Fee (1 property)	EA	$500.00	1	$500	1	$500	1	$500	1	$500	1	$500	1	$500
	Design Fee	LS	$33,000.00	1	$33,000	1	$33,000	1	$33,000	1	$33,000	1	$33,000	1	$33,000
			Estimated Barrier Cost		**$1,023,000**		**$1,041,000**		**$1,059,000**		**$1,078,000**		**$1,098,000**		**$1,117,000**
			Number of Benefitted Receptors		1		1		1		1		1		1
			Total Allowance for this sound wall		**$146,000**		**$146,000**		**$146,000**		**$146,000**		**$146,000**		**$146,000**
			Is the Construction Cost less than the Allowance?		**No**		**No**		**No**		**No**		**No**		**No**

* Includes temporary access from local street and private driveway for construction vehicle & drill rig.

46. BARRIER SW2007C

Type: Masonry Block on Pile Cap (Case 2 per Caltrans Standard Plan B15-3)

638 ft Barrier length

Minimum barrier height that achieves the noise reduction design goal.

Itemized Cost Estimate:			Barrier Height	6 ft		8 ft		10 ft		12 ft		14 ft		16 ft	
Code	**Description**	**Unit**	**Unit Price**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**	**Quantity**	**Cost**
090105	Time-Related Overhead (LS)	LS	Varies	1	$51,100	1	$55,800	1	$60,500	1	$66,200	1	$71,800	1	$78,400
130100	Job Site Management	LS	$8,000.00	1	$8,000	1	$8,000	1	$8,000	1	$8,000	1	$8,000	1	$8,000
170103	Clearing and Grubbing (LS)	LS	$19,300.00	1	$19,300	1	$19,300	1	$19,300	1	$19,300	1	$19,300	1	$19,300
202038	Packet Fertilizer	EA	$8.00	90	$720	90	$720	90	$720	90	$720	90	$720	90	$720
204038	Plant (Group U)	EA	$225.00	18	$4,050	18	$4,050	18	$4,050	18	$4,050	18	$4,050	18	$4,050
204099	Plant Establishment Work	LS	$8,000.00	1	$8,000	1	$8,000	1	$8,000	1	$8,000	1	$8,000	1	$8,000
205035	Wood Mulch	CY	$365.00	3.6	$1,314	3.6	$1,314	3.6	$1,314	3.6	$1,314	3.6	$1,314	3.6	$1,314
498016	16" Dia CIDH Concrete Piling (Case 2, Φ = 30)	LF	$150.00	519	$77,906	599	$89,869	682	$102,230	852	$127,750	1,022	$153,270	1,277	$191,550
510061	Structural Concrete, Soundwall (Pile Cap D=1.75', W=1.50')	CY	$1,500.00	62.0	$93,042	62.0	$93,042	62.0	$93,042	62.0	$93,042	62.0	$93,042	62.0	$93,042
520101	Bar Reinforcing Steel (Pile Cap)	LB	$5.72	8,879	$50,788	8,879	$50,788	8,925	$51,050	9,108	$52,100	9,292	$53,149	9,567	$54,724
582001	Soundwall (Masonry Block)	SQFT	$45.00	4,147	$186,615	5,423	$244,035	6,699	$301,455	7,975	$358,875	9,251	$416,295	10,527	$473,715
582001	Access Gate (Soundwall)	EA	$10,000.00	6	$60,000	6	$60,000	6	$60,000	6	$60,000	6	$60,000	6	$60,000
600051A	Remove Wall/Fence	LF	$150.00	638	$95,700	638	$95,700	638	$95,700	638	$95,700	638	$95,700	638	$95,700
731502	Minor Concrete (Miscellaneous Construction)	CY	$2,200.00	0.9	$2,035	0.9	$2,035	0.9	$2,035	0.9	$2,035	0.9	$2,035	0.9	$2,035
210XXX	NPDES Erosion Control	LS	$15,000.00	1	$15,000	1	$15,000	1	$15,000	1	$15,000	1	$15,000	1	$15,000
	Geotechnical Test Boring & Soil Lab Testing	EA	$6,500.00	3	$19,500	3	$19,500	3	$19,500	3	$19,500	3	$19,500	3	$19,500
	Traffic Control, Minor items, etc.	LS	$20,000.00	1	$20,000	1	$20,000	1	$20,000	1	$20,000	1	$20,000	1	$20,000
	Remove Pilasters	EA	$1,000.00	14	$14,000	14	$14,000	14	$14,000	14	$14,000	14	$14,000	14	$14,000
	Landscaping Restoration	LS	$80,000.00	1	$80,000	1	$80,000	1	$80,000	1	$80,000	1	$80,000	1	$80,000
999990	Mobilization	LS	$91,000.00	1	$91,000	1	$91,000	1	$91,000	1	$91,000	1	$91,000	1	$91,000
	Permanent Footing Easement (2' wide)	LS	$29,000.00	1	$29,000	1	$29,000	1	$29,000	1	$29,000	1	$29,000	1	$29,000
	Temporary Construction Easement (53,937 SF)*	LS	$337,000.00	1	$337,000	1	$337,000	1	$337,000	1	$337,000	1	$337,000	1	$337,000
	Appraisal Fee (7 properties)	EA	$10,000.00	7	$70,000	7	$70,000	7	$70,000	7	$70,000	7	$70,000	7	$70,000
	Title Fee (7 properties)	EA	$650.00	7	$4,550	7	$4,550	7	$4,550	7	$4,550	7	$4,550	7	$4,550
	Inspection Fee (7 properties)	EA	$500.00	7	$3,500	7	$3,500	7	$3,500	7	$3,500	7	$3,500	7	$3,500
	Design Fee	LS	$37,000.00	1	$37,000	1	$37,000	1	$37,000	1	$37,000	1	$37,000	1	$37,000
			Estimated Barrier Cost		**$1,380,000**		**$1,454,000**		**$1,528,000**		**$1,618,000**		**$1,708,000**		**$1,812,000**
			Number of Benefitted Receptors		1		1		1		1		1		1
			Total Allowance for this sound wall		**$146,000**		**$146,000**		**$146,000**		**$146,000**		**$146,000**		**$146,000**
			Is the Construction Cost less than the Allowance?		**No**		**No**		**No**		**No**		**No**		**No**

* Includes 5' inside properties at sounwall location, sloped area behind residential properties, and temporary access from local street through commercial property private drive isle for construction vehicle & drill rig.