September 25, 2024

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Subject: Updated General Biological Assessment and Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis for Assessor's Parcel Numbers 152-060-007, 152-060-009, and 152-020-010, and a portion of 152-060-006 located within city of Jurupa, Riverside County, California

Mr. Galvez,

Hernandez Environmental Services (HES) was contracted to prepare an update to the 2020 General Biological Assessment (GBA) and Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis for Assessor's Parcel Numbers (APNs) 152-060-009, and 152-020-010, and a portion of 152-060-006 and 152-060-007 located within city of Jurupa, Riverside County, California. The purpose of this GBA update is to identify any potential biological resources that may be present on or adjacent to the project site.

Project Site Location

The approximate 14.27-acre project site is located south of 68th Street, north of the Santa Ana River, and east of the Interstate 15 freeway within the city of Jurupa Valley, Riverside County, California. The site consists of Riverside County APNs 152-060-007, 152-060-009, and 152-020-010, and a portion of 152-060-006. Specifically, the project site is located within the Jurupa (Stearns) land Grant of the *Corona North* United States Geological Survey (USGS) 7.5' topographic quadrangle map. The center point latitude and longitude for the project site are 33°57'20.6512" North and 117°32'47.2133" West. Refer to Figures 1 and 2.

The project site is located within the boundaries Western Riverside County MSHCP in the Eastvale Area Plan, in the Santa Ana River Central Subunit (SU1). Approximately 12.5 acres of the site occurs within Criteria Cell Number 698. The remaining 1.77 acres of the site are located outside of a Criteria Cell.

Project Description

The project proposes to construct an approximate 488,477 square foot RV Self-Storage Facility including a storage and office building, RV parking area, access road, borrow area/detention basin, landscaping, and related infrastructure. The proposed project will impact approximately 13.94 acres of the site, of which 12.05 acres are within Criteria Cell Number 698. Refer to Figure 3.

The project proposes to elevate the self-storage building and RV parking area out of the 100-year flood plain utilizing the proposed borrow area. The borrow area will ultimately be utilized as a detention basin. An access road will be constructed from 68th Street to the RV Self-Storage Facility and will extend around the borrow area/detention basin.

The proposed borrow area/detention basin will be set back from the adjacent Santa Ana River. No offsite construction or staging will occur outside of the development footprint. No fuel modification modification/weed abatement zones are proposed or required as part of the project. In addition, no temporary impacts are proposed onsite or offsite. All manufactured slopes and erosion control features will be confined to the project impact area. Further, best management practices (BMPs) will be employed in accordance with water pollution and erosion control plans prepared for the project, as required by the Regional Water Quality Control Board (RWQCB).

Literature Review

HES conducted a literature review and reviewed aerial photographs and topographic maps of the project site and surrounding areas. A five-mile radius was used to identify sensitive species with the California Department of Fish and Wildlife (CDFW) California Natural Diversity Data Base (CNDDB), the U.S. Fish and Wildlife Service (USFWS) Endangered Species Lists, and the California Native Plant Society (CNPS) rare plant lists to obtain species information for the project area. The CNDDB and USFWS critical habitat databases were utilized, together with Geographic Information System (GIS) software, to locate the previously recorded locations of sensitive plant and wildlife occurrences and designated critical habitat and determine the distance from the project site. Additionally, the Western Riverside County MSHCP was reviewed for information on known occurrences of sensitive species within Riverside County.

Existing Conditions and Results

On May 26, 2022, HES biologists conducted a field survey of the project site to verify site conditions and note any changes. This letter outlines the findings of the May, 26, 2022 survey. The ambient temperature at 10:00 a.m. was 75 degrees Fahrenheit, partly cloudy, with winds ranging from zero to one mile per hour from the north. The purpose of the field survey was to document the existing habitat conditions, obtain plant and animal species information, view the surrounding land uses, assess the potential for state and federal waters, assess the potential for wildlife movement corridors, and assess the presence of constituent elements for critical habitat, if present.

Linear transects spaced approximately 50 to 100 feet apart were walked across the project site for 100 percent coverage. All species observed were recorded. Global Positioning System (GPS) waypoints were taken to delineate specific habitat types, species locations, state or federal waters, and any other information that would be useful for the assessment of the project site. A comprehensive list of all plant and wildlife species that were detected during the field survey within the project site is included in Appendix A. Sensitive plant and wildlife species with the potential to occur within the project area are listed in Appendix B. Representative site photographs were taken and are included within Appendix C.

<u>Environmental Setting</u>

The project site is located in the city of Jurupa Valley within Riverside County, California. The project site is vacant and appears to be continually disturbed by weed abatement activities and off-road vehicle use. The site is relatively flat with onsite elevations ranging from 588 feet above mean sea-level (AMSL) to 640 feet AMSL. Surrounding land uses include residential developments to the north and west, the I-15 freeway runs to the west, and riparian habitat connecting to the Santa Ana River to the south and east.

Soils

Four soil classes are identified to occur on the project site by the USDA Web Soil Survey (Appendix D). Soils at the project site are classified as:

- Grangeville loamy fine sand (GoB), drained, 0 to 5 percent slopes,
- Grangeville fine sandy loam (GvB), saline-alkali, 0 to 5 percent slopes,
- Monserate sandy loam (MmD2), 8 to 15 percent slopes, eroded, and
- Placentia fine sandy loam (PlB), 0 to 5 percent slopes.

Plant and Habitat Communities

The 14.27-acre project site contains five habitat types: disturbed, disturbed non-native vegetation, mulefat scrub, and riparian woodland, as described below. Refer to Figure 4.

Disturbed Areas

The northern portion of the project site contains approximately 2.96-acres of disturbed, non-vegetated areas. These areas consist of dirt roads and paved areas within the northern portion of the project site. Approximately 1.89 acres of this habitat is not located within a Criteria Cell. Approximately 1.06 acres of this habitat is located within Criteria Cell Number 698.

Disturbed Non-Native Vegetation

The northwestern portion of the site contains approximately 11.09-acres of disturbed, non-native vegetation dominated by species such as black mustard (*Brassica nigra*), Russian thistle (*Salsola tragus*), and *bromus sp*. This habitat is located within Criteria Cell Number 698.

Mulefat Scrub Habitat

The site contains approximately 0.06 acres of mulefat scrub habitat. This habitat is characterized as lower growing dense shrubs. Species observed in this habitat type include mulefat, arrowweed (*Pluchea sericea*), and arroyo willow. This habitat is located within Criteria Cell Number 698.

Riparian Woodland

The site contains approximately 0.16 acres of Fremont cottonwood (*Populus fremiontii*) dominant forest. This habitat type has a very dense understory of southern riparian scrub dominated by arroyo willow (*Salix lasiolepis*), red willow (*Salix laevigata*), narrow leaf willow (*Salix exigua*), black willow (*Salix gooddinii*), mulefat (*Baccharis salicifolia*), and arrowweed. This habitat is located within Criteria Cell Number 698.

Wildlife

General wildlife species documented on the project site or within the vicinity of the site include red-tailed hawk (*Buteo jamaicensis*), Anna's hummingbird (*Calypte* anna), coyote (*Canis* latrans), American crow (*Corvus brachyrhynchos),* American kestrel (*Falco sparverius*), house finch (*Haemorhous mexicanus*), California towhee (*Melozone crissalis*), California ground squirrel (*Otospermophilus beecheyi*), house sparrow (*Passer domesticus*), black phoebe (*Sayornis nigricans*), Lawrence's goldfinch (*Spinus lawrencei*),

Western meadowlark (*Sturnella neglecta*), desert cottontail (*Sylvilagus audubonii*), mourning dove (*Zenaida macroura*), and white-crowned sparrow (*Zonotrichia leucophrys*). The complete list of species observed is included in Appendix A.

Regional Connectivity/ Wildlife Movement

Wildlife movement corridors can be local or regional in scale; their functions may vary temporally and spatially based on conditions and species present. Wildlife corridors represent areas where wildlife movement is concentrated due to natural or anthropogenic constraints. Local corridors provide access to resources such as food, water, and shelter. Animals use these corridors, which are often hillsides or riparian areas, to move between different habitats. Regional corridors provide these functions and link two or more large habitat areas. They provide avenues for wildlife dispersal, migration, and contact between otherwise distinct populations.

The project site was evaluated for its function as a wildlife corridor. The project site is not located within a designated wildlife corridor or linkage. The project site is located north of the Santa Ana River which is a designated wildlife corridor and linkage and has the potential to be utilized by mammals, birds, reptiles and amphibians to move along the Santa Ana River Corridor. Plants species also rely on animal and hydrologic mechanisms to disperse their seeds, and these mechanisms are functioning adjacent to the project site within the Santa Ana River. The project site is relatively flat and primarily consists of disturbed non-vegetated areas and disturbed non-native vegetation. No wildlife movement corridors were found to be present on the project site.

Critical Habitat

The site is located within designated federal critical habitat for least Bell's vireo (*Vireo bellii pusillus*) and Santa Ana sucker (*Catostomus santaanae*). Critical habitat for southwestern willow flycatcher (*Empidonax traillii extimus*) is located approximately 1.2 miles southwest of the site. The project proposes to avoid and conserve the portions of the site located within critical habitat.

Sensitive Plant Species

A total of 45 plant species are listed as state and/or federal Threatened, Endangered, or Candidate species; are required to be reviewed under the Narrow Endemic Plant section of the Western Riverside MSHCP; are 1B.1 listed plants on the CNPS Rare Plan Inventory; or have been found to have a potential to occur on the project site. Based upon the literature review and field surveys, the following sensitive plant species have been determined to have a potential to be present on the project site:

Nevin's barberry

Nevin's barberry (*Berberis nevinii*) is a federally and state listed Endangered species and is ranked 1B.1 in the CNPS Rare Plant inventory. It is typically found on steep, north facing slopes or in low grade sandy washes. Its habitat includes chaparral, cismontane woodland, coastal scrub, and riparian scrub. Suitable habitat for this species is present within the Riversidean alluvial fan sage scrub, riparian scrub, and riparian woodland habitats on the project site. **This species has the potential to be present.**

Lucky morning-glory

Lucky morning-glory (*Calystegia felix*) is ranked 1B.1 in the CNPS rare plant inventory. It is often found in disturbed sites near the coast, at marsh edges. It is also found in alkaline soils and sometimes with saltgrass. This species is sometimes found on vernal pool margins. Its habitat includes meadows and seeps, and riparian scrub. Suitable habitat for this species is present within the Riversidean alluvial fan sage scrub and riparian woodland on the project site. **This species has the potential to be present.**

Smooth tarplant

Smooth tarplant (*Centromadia pungens ssp. laevis*) is ranked 1B.1 in the CNPS rare plant inventory. The species occurs in habitats that include alkali playa, chenopod scrub, meadows and seeps, riparian woodlands, wetlands, and valley and foothill grasslands. Suitable habitat for this species is present within the Riversidean alluvial fan sage scrub and riparian woodland on the project site. **This species has the potential to be present.**

White rabbit-tobacco

White rabbity-tobacco (*Pseudognaphalium leucocephalum*) is ranked 2B.2 in the CNPS rare plant inventory. Its habitat includes riparian woodland, cismontane woodland, chapparal, and coastal scrub. Suitable habitat for this species is present within the Riversidean alluvial fan sage scrub and riparian woodland on the project site. **This species has the potential to be present.**

Sensitive Habitats

A total of 10 sensitive habitats have the potential to occur on the project site, including California Walnut Woodland, Southern California Arroyo Chub/Santa Ana Sucker Stream, Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Interior Cypress Forest, Southern Riparian Forest, Southern Riparian Scrub, Southern Sycamore Alder Riparian Woodland, Southern Willow Scrub, and Riversidian Alluvial Fan Sage Scrub. Southern Cottonwood Willow Riparian Forest habitat occurs on the site.

Sensitive Wildlife Species

A total of 62 wildlife species are listed as state and/or federal Endangered, Threatened and Candidate were identified to have a potential to occur on the project site. All sensitive species within a 5-mile radius of the project area were reviewed and a complete list of those species are discussed within Appendix B. Based upon the literature review and field surveys, the following sensitive wildlife species have been determined to have a potential to be present on the project site based:

Burrowing owl

Burrowing owl (*Athene cunicularia*) is a CDFW Species of Special Concern. Its habitat includes coastal prairie, coastal scrub, Great Basin grassland, Great Basin scrub, Mojave Desert scrub, Sonoran Desert scrub, and valley and foothill grassland. This species is typically found in open and dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. It is a subterranean nester and is dependent upon burrowing mammals, most notably the California ground squirrel.

The project site consists of disturbed habitats adjacent to the I-15 Freeway. The site is vacant and appears to be continually disturbed by weed abatement activities and off-road vehicle use. Although there is evidence of ground squirrels and ground squirrel activities on the site, no suitable burrows/nesting opportunities for this species are present on the site. A portion of the project site is regularly maintained for weed abatement purposes. The remainder of the site is densely vegetated with a tall herbaceous layer. The southern boundary of the site is bordered by tall trees that support raptors that prey on burrowing owl. No burrowing owl or burrowing owl sign was observed within the project area. **This species is not present.**

Nesting Birds

Migratory non-game native bird species are protected under the federal Migratory Bird Treaty Act. Additionally, Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit take of all birds and their active nests. The project site contains trees and shrubs that can be utilized by nesting birds and raptors during the nesting bird season of February 1 through September 30.

Jurisdictional Drainages

The project site contains approximately 0.06 acre of mulefat scrub and 0.16 acre of riparian woodland that would be considered jurisdictional features and associated riparian habitat. These areas would fall under the jurisdiction of state and federal agencies such as the CDFW, the RWQCB, and the United States Army Corps of Engineers (USACE).

Project Impacts

Impacts to Habitats

The project proposes the construction of an RV Self-Storage Facility. Implementation of the proposed project will impact approximately 13.94 acres of the site. Impacts will occur to 1.89 acres of disturbed habitat not within a Criteria Cell. Approximately 1.06 acres of disturbed habitat and 10.99 acres of disturbed non-native vegetation to be impacted by the proposed project occur within Criteria Cell Number 698 (Figure 5).

Impacts to Sensitive Species

The following sensitive plant and wildlife species were determined to have the potential to be present on the site. Based upon current site plans, the project activities were evaluated to determine the potential for impacts to these species.

Nevin's barberry

Nevin's barberry is a federally and state listed Endangered species and is ranked 1B.1 in the CNPS Rare Plant inventory. Suitable habitat for this species is present within the mulefat scrub and riparian woodland habitats on the project site. The proposed development will only occur within the disturbed portion of the site and will avoid impacts to the onsite mulefat scrub and riparian woodland habitats. Therefore, no impacts to this species will result from project implementation.

Lucky morning-glory

Lucky morning-glory is ranked 1B.1 in the CNPS rare plant inventory. Suitable habitat for this species is present within the riparian woodland on the project site. This species has the potential to be present on the project site; however, the proposed project will avoid impacts to the onsite riparian woodland. Therefore, no impacts to this species will result from project implementation.

Smooth tarplant

Smooth tarplant is ranked 1B.1 in the CNPS rare plant inventory. Suitable habitat for this species is present within the riparian woodland on the project site. The proposed development will only occur within the disturbed portion of the site and will avoid impacts to the onsite riparian woodland. Therefore, no impacts to this species will result from project implementation.

White rabbit-tobacco

White rabbity-tobacco is ranked 2B.2 in the CNPS rare plant inventory. Suitable habitat for this species is present within the riparian woodland on the project site. The proposed development will only occur within the disturbed portion of the site and will avoid impacts to the onsite riparian woodland. Therefore, no impacts to this species will result from project implementation.

Impacts to Nesting Birds

If the project will remove onsite vegetation between February 1 and September 15, the project will have a potential to impact nesting birds. Implementation of the measures identified in the Mitigation Measures section will ensure that potential impacts to nesting birds are less than significant.

Impacts to Wildlife Movement Corridors

Wildlife movement corridors link together areas of suitable habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbances. The project site was evaluated for its function as a wildlife corridor that species would use to move between wildlife habitat zones. The project site is not located within a designated wildlife corridor or linkage. The project site is located north of the Santa Ana River which is a designated wildlife corridor and linkage and has the potential to be utilized by mammals, birds, reptiles and amphibians to move along the Santa Ana River Corridor. Plants species also rely on animal and hydrologic mechanisms to disperse their seeds, and these mechanisms are functioning adjacent to the project site within the Santa Ana River. The project site is relatively flat and consists of disturbed non-vegetated areas and disturbed non-native vegetation. No wildlife movement corridors were found to be present on the project site. The proposed project will occur wholly within the boundaries of the project site and no offsite impacts will occur; therefore, no impacts to wildlife movement corridors will result from project implementation.

Impacts to Jurisdictional Drainages

The project site contains approximately 0.06 acre of mulefat scrub and 0.16 acre of riparian woodland that would be considered jurisdictional features and associated riparian habitat. These areas would fall under the jurisdiction of state and federal agencies such as the CDFW, the RWQCB, and the USACE. The proposed project was designed to avoid impacts to all onsite jurisdictional features and riparian habitats; therefore, no impacts to jurisdictional drainages or associated riparian vegetation will result from project implementation.

Western Riverside County MSHCP Consistency Analysis

The project site is located within the Eastvale Area Plan, in the Santa Ana River Central Subunit (SU1), and within Criteria Cell Number 698. The site is not located within a Cell Group. Refer to Figure 6. The target conservation acreage range for the Eastvale Area Plan is between 1,040 and 1,185 acres. The target conservation range for the City of Temecula is between 600 and 1,380 acres. The target conservation range for the Santa Ana River Central Subunit is between 145 and 290 acres. Conservation within Criteria Cell 698 focus on riparian scrub, woodland and forest and water habitats associated with Santa Ana River. Areas to be conserved within this Criteria Cell will be connected to riparian habitat proposed for conservation in Cell 788 to the south; and to riparian habitat proposed for conservation in Cell 699 to the east. Conservation within Criteria Cell 698 ranges from 35 to 45 percent of the Criteria Cell, focusing on the southeast portion of the Cell. Criteria Cell 698 consists of approximately 149.09 acres of which between 52.18 to 67.09 acres must be conserved to meet the Cell criteria. According to Riverside County GIS data, Cell 698 currently has a total of 18.16 acres (12%) of conserved/PQP lands. Cell 698 also contains approximately 72.65 acres of undeveloped lands. Refer to Figure 6. Based upon the existing conservation lands within Criteria Cell 698 and the lands available for conservation within the Cell, the Cell will meet and exceed the Cell criteria.

The 14.27-acre project site is located within the western portion of Cell 698 and is dominated by disturbed and disturbed non-native vegetation. Small areas of mulefat scrub and riparian woodland (totaling approximately 0.22 acre) are located within the southernmost portion of the site within Criteria Cell Number 698 (Figure 4). The project has been designed to avoid and conserve these small patches of sensitive vegetation (Figure 5). A deed restriction will be placed over the avoided onsite mulefat scrub and riparian woodland areas.

A discussion of the applicable Western Riverside County MSHCP requirements follows:

Section 6.1.2 Species Associated with Riparian/Riverine Habitat and Vernal Pools

The project site contains approximately 0.06 acre of mulefat scrub and 0.16 acre of riparian woodland that would be considered MSHCP riparian/riverine resources. The onsite riparian/riverine resources are associated with the Santa Ana River located to the south of the project site. The proposed project has been designed to avoid the onsite riparian/riverine resources. A deed restriction will be placed over the avoided onsite riparian/riverine resource areas.

Although limited suitable habitat exists on the project site for the riparian/riverine bird species listed in Section 6.1.2 of the MSHCP, the project will avoid impacts to the onsite habitat such that focused surveys are not warranted. However, potentially suitable habitat for the riparian/riverine bird species listed in Section 6.1.2 of the MSHCP occurs offsite to the south. According to the Noise Impact Study and Addendum prepare for the project, existing ambient noise levels at the project site range between 49.6 dBA to 63.5 dBA (Appendix E). The project site is located adjacent to the I-15 Freeway which is the primary sources of noise impacting the site and the surrounding area. The Noise Impact Study anticipates unmitigated noise levels at 290 feet have the potential to reach 67.4 dBA at the property boundary during construction. In order to mitigate potential indirect impacts to riparian/riverine bird species, the following mitigation measures shall be implemented:

- To avoid indirect impacts, project construction and site preparation activities including but not limited to vegetation clearing and grubbing within 300 feet of Section 6.1.2 riparian/riverine bird (specifically least Bell's vireo [LBV], southwestern willow flycatcher [SWFL], and yellow-billed cuckoo [YBCU]) habitat will be conducted outside of the LBV/SWFL/YBCU breeding season (March 15 to September 30).
- If construction activities must occur during the LBV/SWFL/YBCU breeding season, pre-construction surveys to determine if each of the species occurs within 300 feet of project construction, will occur once a week for three consecutive weeks within the breeding season, with the last visit no more than 3 days prior to commencement of construction activities. The preconstruction survey visits for LBV/SWFL/YBCU will be conducted by a qualified biologist familiar with each of the species' vocalizations characteristic of adults and juveniles. Surveys will be conducted between dawn and 11AM. Surveys will not be conducted during periods of excessive or abnormal cold, heat, wind, rain, or other inclement weather that individually or collectively may reduce the likelihood of detection. Surveys will not cover more than 3 linear kilometers (2 miles) or more than 50 hectares (123 acres) of habitat on any given day. Prior to performing the preconstruction surveys, a map will be created illustrating the LBV/SWFL/YBCU habitat and all detections of LBV/SWFL/YBCU will be mapped and tracked.
- Directly following the preconstruction surveys, weekly clearance surveys will be performed following the same methodology stated above for the preconstruction surveys. Again, all detections of LBV/SWFL/YBCU are to be mapped with behavior tracked across detections/sightings. The qualified biologist must have experience with nesting ecology and behavior of each of the Section 6.1.2 riparian/riverine bird species to determine pre-nesting/nesting behavior. The MSHCP does not provide "take" of LBV/SWFL/YBCU which includes negatively modifying foraging and nesting behavior. If at any time it is determined by the qualified biologist that construction activities are negatively affecting LBV/SWFL/YBCU, including modification of behavior, work will be halted and CDFW and USFWS will be contacted on next steps.
- Daily noise monitoring will be required during the breeding season. A qualified biological monitor must be present to measure noise levels at the edge of all suitable habitat and work shall cease if, at any time, noise levels exceed the existing noise levels of 63.5 dBA. Noise monitoring will

continue throughout the breeding season or until construction activities have halted within 300 feet of LBV/SWFL/YBCU habitat. CDFW and USFWS can be contacted on next steps if the project not able to reduce the noise. Construction activities during the breeding season will be limited to the hours of 8AM to 7PM.

The entire site was evaluated for the presence of habitat capable of supporting branchiopods. Habitat was evaluated as described in the USFWS Survey Guidelines for the Listed Large Branchiopods (May 31, 2016). The project area is primarily disturbed by weed abatement activities and off-road vehicle use. The sandy loams that occur on the site do not allow for water pooling on the site for any significant length of time after rain events. No vernal pools, swales, or vernal pool mimics such as ditches, borrow pits, cattle troughs, or cement culverts with signs of pooling water were found on the site. In addition, the site does not contain areas that showed signs of ponding water, hydrophytic vegetation, or soils typical of vernal pools that would be suitable for large branchiopods.

Section 6.1.3 Sensitive Plant Species

The project site is located within the Western Riverside County MSHCP NEPSSA pursuant to Section 6.1.3 of the MSHCP for San Diego Ambrosia (*Ambrosia pumila*), San Miguel Savory, and Brand's Phacelia (*Phacelia stellaris*). The entire project site was evaluated for suitable habitat for these plant species. The project site consists primarily of disturbed habitats continually impacted by weed abatement activities and off-road vehicle use. Table 1 below includes a description and habitat analysis for these species.

Table 1.
Western Riverside County MSHCP NEPSSA Species Habitat Assessment

Scientific Name	Common Name	Habitat	Blooming Period	Habitat Analysis
Ambrosia pumila	San Diego ambrosia	This species is found on sandy loam or clay, sometimes on alkaline soils. It is found in chaparral, coastal sage scrub, valley and foothill grassland and around vernal pools. It can occur in lightly disturbed areas if suitable conditions exist.	April-October	The nearest populations of this species are approximately 2.5 miles northwest of the site. In addition, the project site is mostly unsuitable for this species, although the species could occur in disturbed portions of the project site dominated by non-native vegetation. However, the field survey was conducted within the blooming season for the species and no San Diego ambrosia were detected on the site. This species is not likely to be present. Therefore, no

				further surveys are proposed.
Satureja chandleri	San Miguel savory (Santa Rosa Plateau, Steele Rock)	Found on rocky, grabbroic or metavolcanic soils in chaparral, cismontane woodland, coastal scrub, riparian woodland, and valley and foothill grasslands, at elevations ranging from 360 to 3,015 feet.	March-July	No chaparral, cismontane woodland, coastal scrub, or valley and foothill grassland occur on site. There is a small amount of riparian woodland on site. However, no suitable soils, rocky or metavolcanic soils, occur on site. This species is not present.
Phacelia stellaris	Brand's phacelia	Found in coastal dunes and coastal scrub at elevations ranging from 3 to 1,300 feet.	March-June	No coastal dunes or coastal scrub occur on site. This species is not present.

Section 6.1.4 Urban/Wildlands Interface Guidelines

The project site contains riparian/riverine resources that will be avoided by development of the proposed project. Additionally, the project site is located adjacent to the Santa Ana River, which contains riparian/riverine resources. Therefore, the Urban/Wildlands Interface Guidelines (Section 6.14 of the MSHCP) would be required to be applied to the project. The following mitigation measures shall be incorporated into the project to reduce potential impacts to the onsite and offsite riparian/riverine resources and adjacent MSHCP Conservation Areas:

Drainage – Water Quality Best Management Practices (BMPs) shall be incorporated, including the National Pollutant Discharge Elimination Systems (NPDES) and erosion control requirements from the Regional Water Quality Control Board to ensure that the quantity and quality of surface water runoff discharged into the onsite and offsite riparian/riverine resources is not altered in an adverse way when compared with existing conditions. These BMPs will be implemented as part of the Storm Water Pollution Prevention Plan (SWPPP) in order to ensure that water quality is not degraded.

Toxics - Measures such as those employed to address drainage issues will be implemented for toxics. Land uses proposed in proximity to the offsite drainage that use chemicals or generate bioproducts that are potentially toxic or may adversely affect wildlife species, habitat or water quality must incorporate measures to ensure that application of such chemicals does not result in discharge to the onsite and offsite riparian/riverine resources.

Lighting - Any night lighting will be directed away from the onsite and offsite riparian/riverine resources and adjacent MSHCP Conservation Areas to protect species from direct nighttime lighting. If nighttime lighting is required, shielding will be incorporated in the design to ensure ambient nighttime lighting does not exceed that of pre-project conditions as a result of light spill from the project site. The RV Self-Storage

Facility will be responsible for maintaining the lighting in perpetuity, and any lighting issues will be addressed within 30 days of receiving input from the RCA.

Noise - Proposed noise generating land uses affecting the onsite and offsite riparian/riverine resources and adjacent MSHCP Conservation Areas must incorporate setbacks to minimize the effects of noise on adjacent habitat.

Invasives - Invasive, non-native plant species must not be used as landscaping materials for development that is proposed adjacent to the onsite and offsite riparian/riverine resources and adjacent MSHCP Conservation Areas. Table 6-2 of Volume 1 of the MSHCP lists the plants that should be avoided.

Barriers - Proposed land uses adjacent to the onsite and offsite riparian/riverine resources and MSHCP Conservation Areas must incorporate barriers, such as native landscaping, rocks/boulders, fencing, walls, signage and/or other appropriate mechanisms, to minimize unauthorized public access, domestic animal predation, illegal trespass or dumping. The barrier will be designed to prevent access to the adjacent MSHCP Conservation Area by unauthorized public access, domestic animals, and illegal trespass or dumping. The project has been designed to include the installation of a 6-foot wrought iron fence with no greater than 2-inch openings. In addition, a block retaining wall is proposed along the southern side of the proposed basin. The fence/barrier will be buried a minimum of 12 inches below the ground surface to prevent domestic animals from gaining access to the MSHCP Conservation Area by digging under the fence/barrier. Further, the fencing and block wall will be maintained in perpetuity by the RV Self-Storage Facility and any fencing issues will be repaired within 30 days of receiving input from the RCA.

Grading/Land Development - Manufactured slopes associated with proposed site development must not extend into the onsite and offsite riparian/riverine resources.

Section 6.3.2 Additional Surveys and Procedures

The project site is not located within the Western Riverside County MSHCP Criteria Area Plant Species Survey Area (CAPSSA) pursuant to Section 6.3.2 of the Western Riverside County MSHCP. Further, the project site is not located within the Western Riverside County MSHCP Additional survey areas for amphibians, mammals, or any special linkage areas.

The project site is located within the Western Riverside County MSHCP additional survey area for burrowing owl. The field survey methods employed for the BUOW Habitat Assessment survey followed the protocol found in the *Burrowing Owl Survey Instructions for the Western Riverside Multiple Species Habitat Conservation Plan Area*. The protocol consists of a Step I (habitat assessment), Step II-A (focused burrow survey), and Step II-B (focused burrowing owl surveys). On May 26, 2022, HES biologist conducted Step I and Step II-A of a burrowing owl habitat assessment on site. The ambient temperature at 10:00 a.m. was 75 degrees Fahrenheit, partly cloudy, with winds ranging from zero to one mile per hour from the north. The Step I and Step II-A survey was conducted during the breeding season (March 1 – August 31) and during weather that was conducive to observing owls outside their burrows and detecting

burrowing owl signs. The survey was not conducted during rain, high winds (> 20 miles per hour), dense fog, or temperatures above 90 degrees Fahrenheit.

The burrowing owl survey involved walking through potentially suitable habitat within the survey area (i.e., the survey area included areas that will be directly or indirectly impacted by the project). The pedestrian survey transects were spaced approximately 30 to 50 feet apart to allow 100 percent visual coverage of the ground surface (Figure 7). During the survey, special attention was paid to those habitat areas that appeared to provide suitable habitat for burrowing owl. If suitable habitat was present, the biologist also walked a 150-meter (approximately 500 feet) buffer zone around the project boundary. If permission to access the buffer areas was not obtainable, the biologist did not trespass, but instead visually inspected adjacent habitats with binoculars.

The Step I habitat assessment found that the disturbed, non-native vegetation habitat on site was potential suitable habitat for burrowing owl. Ground squirrels and ground squirrel activities were observed during the survey along the western border of the site near Interstate 15 and also along the landscaping for the adjacent residential areas. However, the Step II-A survey found that no suitable burrows/nesting opportunities for this species were present on the site. The areas where ground squirrels were observed are not suitable to support burrowing owls. A portion of the project site is regularly maintained for weed abatement purposes. The remainder of the site is densely vegetated with a tall herbaceous layer. The southern boundary of the site is bordered by tall trees that support raptors that prey on burrowing owl. Therefore, burrowing owl was determined to be not present on the site. However, due to the fact that the project site is located within the Western Riverside County MSHCP burrowing owl survey area, implementation of the measures identified in the Mitigation Measures section will ensure that potential impacts to this species are less than significant.

Mitigation Measures

Based upon the findings of this report, the following studies or surveys shall be performed as part of the project:

Burrowing Owl

A habitat assessment has determined that burrowing owl are not present on the site. However, due to the fact that the project site is located within the Western Riverside County MSHCP burrowing owl survey area, a 30-day preconstruction survey is required prior to the commencement of project activities (e.g. vegetation clearing, clearing and grubbing, tree removal, site watering) to ensure that no owls have colonized the site in the days or weeks preceding project activities. If BUOW are found to have colonized the project site prior to the initiation of construction, the project proponent will immediately inform RCA and the Wildlife Agencies and will need to prepare a Burrowing Owl Protection and Relocation Plan for approval by RCA and the Wildlife Agencies prior to initiating ground disturbance.

Nesting Birds

- It is recommended that vegetation removal be conducted during the non-nesting season to avoid direct impacts to nesting birds. The nesting season is between February 1 and September 30.

- If vegetation removal will occur during the migratory bird nesting season, between February 1 and September 30, it is recommended that preconstruction nesting bird surveys be performed within three days prior to vegetation removal.
- If active nests are found during nesting bird surveys, they shall be flagged, and an appropriate buffer shall be fenced around the nests.
- A biological monitor shall visit the site once a week during ground disturbing activities to ensure all fencing is in place and no nesting birds are being impacted.

Riparian/Riverine Bird Species

- To avoid indirect impacts, project construction and site preparation activities including but not limited to vegetation clearing and grubbing within 300 feet of Section 6.1.2 riparian/riverine bird (specifically least Bell's vireo [LBV], southwestern willow flycatcher [SWFL], and yellow-billed cuckoo [YBCU]) habitat will be conducted outside of the LBV/SWFL/YBCU breeding season (March 15 to September 30).
- If construction activities must occur during the LBV/SWFL/YBCU breeding season, pre-construction surveys to determine if each of the species occurs within 300 feet of project construction, will occur once a week for three consecutive weeks within the breeding season, with the last visit no more than 3 days prior to commencement of construction activities. The preconstruction survey visits for LBV/SWFL/YBCU will be conducted by a qualified biologist familiar with each of the species' vocalizations characteristic of adults and juveniles. Surveys will be conducted between dawn and 11AM. Surveys will not be conducted during periods of excessive or abnormal cold, heat, wind, rain, or other inclement weather that individually or collectively may reduce the likelihood of detection. Surveys will not cover more than 3 linear kilometers (2 miles) or more than 50 hectares (123 acres) of habitat on any given day. Prior to performing the preconstruction surveys, a map will be created illustrating the LBV/SWFL/YBCU habitat and all detections of LBV/SWFL/YBCU will be mapped and tracked.
- Directly following the preconstruction surveys, weekly clearance surveys will be performed following the same methodology stated above for the preconstruction surveys. Again, all detections of LBV/SWFL/YBCU are to be mapped with behavior tracked across detections/sightings. The qualified biologist must have experience with nesting ecology and behavior of each of the Section 6.1.2 riparian/riverine bird species to determine pre-nesting/nesting behavior. The MSHCP does not provide "take" of LBV/SWFL/YBCU which includes negatively modifying foraging and nesting behavior. If at any time it is determined by the qualified biologist that construction activities are negatively affecting LBV/SWFL/YBCU, including modification of behavior, work will be halted and CDFW and USFWS will be contacted on next steps.
- Daily noise monitoring will be required during the breeding season. A qualified biological monitor must be present to measure noise levels at the edge of all suitable habitat and work shall cease if, at any time, noise levels exceed the existing noise levels of 63.5 dBA. Noise monitoring will continue throughout the breeding season or until construction activities have halted within 300

feet of LBV/SWFL/YBCU habitat. CDFW and USFWS can be contacted on next steps if the project not able to reduce the noise. Construction activities during the breeding season will be limited to the hours of 8AM to 7PM.

Section 6.1.4 Urban/Wildlands Interface Guidelines

- Drainage – Water Quality Best Management Practices (BMPs) shall be incorporated, including the National Pollutant Discharge Elimination Systems (NPDES) and erosion control requirements from the Regional Water Quality Control Board to ensure that the quantity and quality of surface water runoff discharged into the onsite and offsite riparian/riverine resources is not altered in an adverse way when compared with existing conditions. These BMPs will be implemented as part of the Storm Water Pollution Prevention Plan (SWPPP) in order to ensure that water quality is not degraded.
- Toxics - Measures such as those employed to address drainage issues will be implemented for toxics. Land uses proposed in proximity to the offsite drainage that use chemicals or generate bioproducts that are potentially toxic or may adversely affect wildlife species, habitat or water quality must incorporate measures to ensure that application of such chemicals does not result in discharge to the onsite and offsite riparian/riverine resources.
- Lighting - Any night lighting will be directed away from the onsite and offsite riparian/riverine resources and adjacent MSHCP Conservation Areas to protect species from direct nighttime lighting. If nighttime lighting is required, shielding will be incorporated in the design to ensure ambient nighttime lighting does not exceed that of pre-project conditions as a result of light spill from the project site. The RV Self-Storage Facility will be responsible for maintaining the lighting in perpetuity, and any lighting issues will be addressed within 30 days of receiving input from the RCA.
- Noise - Proposed noise generating land uses affecting the onsite and offsite riparian/riverine resources and adjacent MSHCP Conservation Areas must incorporate setbacks to minimize the effects of noise on adjacent habitat.
- Invasives - Invasive, non-native plant species must not be used as landscaping materials for development that is proposed adjacent to the onsite and offsite riparian/riverine resources and adjacent MSHCP Conservation Areas. Table 6-2 of Volume 1 of the MSHCP lists the plants that should be avoided.
- Barriers - Proposed land uses adjacent to the onsite and offsite riparian/riverine resources and MSHCP Conservation Areas must incorporate barriers, such as native landscaping, rocks/boulders, fencing, walls, signage and/or other appropriate mechanisms, to minimize unauthorized public access, domestic animal predation, illegal trespass or dumping. The barrier will be designed to prevent access to the adjacent MSHCP Conservation Area by unauthorized public access, domestic animals, and illegal trespass or dumping. The project has been designed to include the installation of a 6-foot wrought iron fence with no greater than 2-inch openings. In addition, a block retaining wall is proposed along the southern side of the proposed basin. The fencing and block wall will

be maintained in perpetuity by the RV Self-Storage Facility and any fencing issues will be repaired within 30 days of receiving input from the RCA.

- Grading/Land Development - Manufactured slopes associated with proposed site development must not extend into the onsite and offsite riparian/riverine resources.

Best Management Practices

In accordance with the MSHCP, the following Standard BMPs shall be incorporated into the overall project and implemented the project impact areas to reduce potential impacts to MSHCP resources.

- A qualified biologist shall be required to conduct a training session for project personnel prior to grading. The training shall include a description of the species of concern and its habitats, the general provisions of the Endangered Species Act (Act) and the MSHCP, the need to adhere to the provisions of the Act and the MSHCP, the penalties associated with violating the provisions of the Act, the general measures that are being implemented to conserve the species of concern as they relate to the project, and the access routes to and project site boundaries within which the project activities must be accomplished.
- Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.
- The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via pre-existing access routes to the greatest extent possible.
- The upstream and downstream limits of projects disturbance plus lateral limits of disturbance on either side of the stream shall be clearly defined and marked in the field and reviewed by the biologist prior to initiation of work.
- Projects should be designed to avoid the placement of equipment and personnel within the stream channel or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern.
- Projects that cannot be conducted without placing equipment or personnel in sensitive habitats should be timed to avoid the breeding season of riparian identified in MSHCP Global Species Objective No. 7.
- When stream flows must be diverted, the diversions shall be conducted using sandbags or other methods requiring minimal instream impacts. Silt fencing of other sediment trapping materials shall be installed at the downstream end of construction activity to minimize the transport of sediments offsite. Settling ponds where sediment is collected shall be cleaned out in a manner that prevents the sediment from reentering the stream. Care shall be exercised when removing silt fences, as feasible, to prevent debris or sediment from returning to the stream.
- Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project related spills of hazardous materials shall be reported to appropriate entities

including but not limited to applicable jurisdictional city, FWS, and CDFG, RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.

- Erodible fill material shall not be deposited into water courses. Brush, loose soils, or other similar debris material shall not be stockpiled within the stream channel or on its banks.
- The qualified project biologist shall monitor construction activities for the duration of the project to ensure that practicable measures are being employed to avoid incidental disturbance of habitat and species of concern outside the project footprint.
- The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to pre-existing contours and revegetated with appropriate native species.
- Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.
- To avoid attracting predators of the species of concern, the project site shall be kept as clean of debris as possible. All food related trash items shall be enclosed in sealed containers and regularly removed from the site(s).
- Construction employees shall strictly limit their activities, vehicles, equipment, and construction materials to the proposed project footprint and designated staging areas and routes of travel. The construction area(s) shall be the minimal area necessary to complete the project and shall be specified in the construction plans. Construction limits will be fenced with orange snow screen. Exclusion fencing should be maintained until the completion of all construction activities. Employees shall be instructed that their activities are restricted to the construction areas.
- The Permittee shall have the right to access and inspect any sites of approved projects including any restoration/enhancement area for compliance with project approval conditions including these BMPs.

Please feel free to contact me via email at shawn@hernandezenvironmental.com or by telephone at 951.334.6219 if you have any questions regarding the findings of this report.

Sincerely,

Shawn Gatchel-Hernandez
Principal Regulatory Specialist

Certification

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Date 07/20/2024 Signed _____

Principal Regulatory Specialist

Fieldwork Performed By:

Elizabeth Gonzales, Senior Biologist

FIGURES

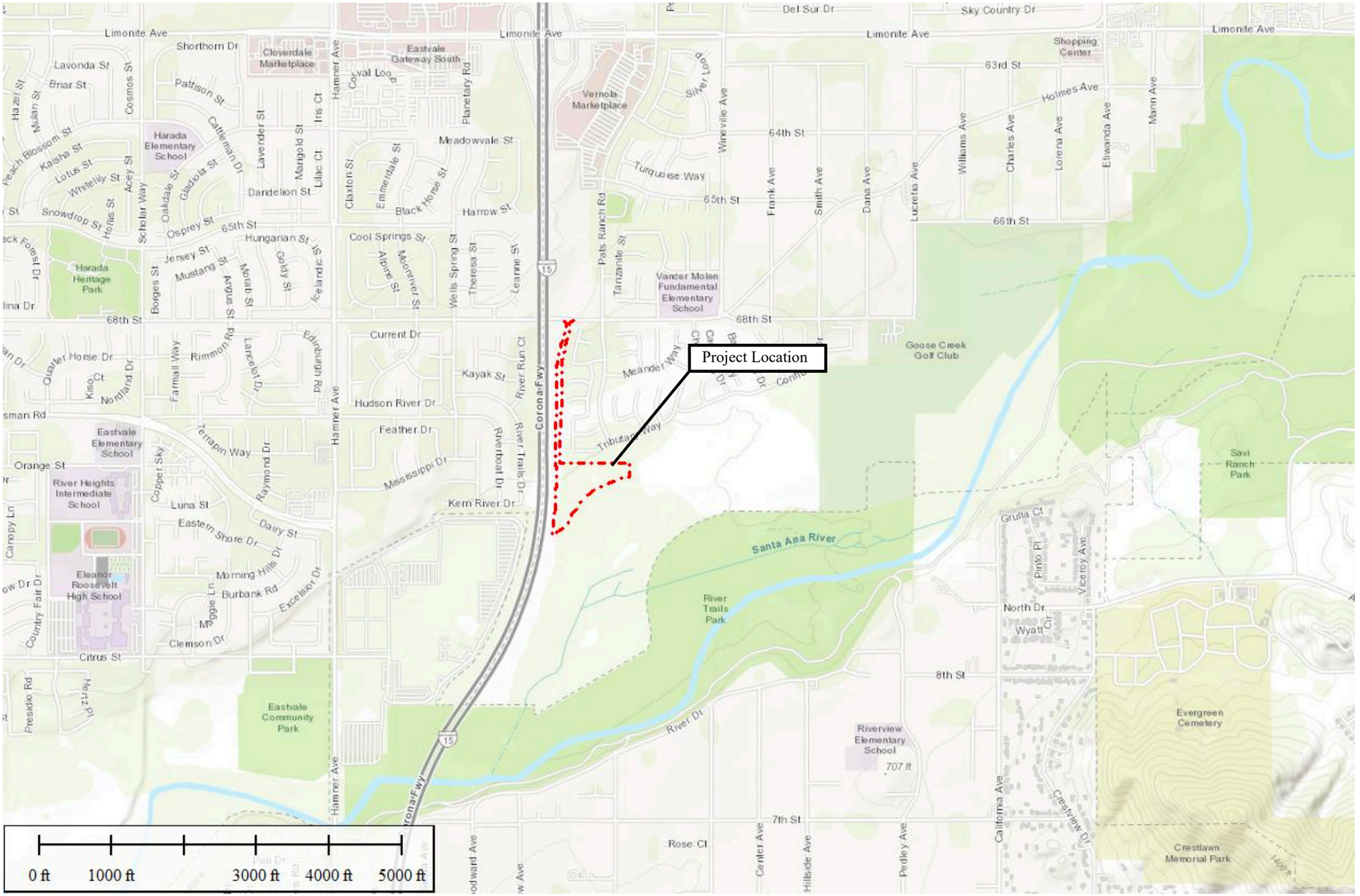


Figure 1

Location Map

APNs 152-020-010,
152-060-009, 007, & 006
City of Jurupa Valley
Riverside County, CA

Legend

Project Boundary

N

Hernandez Environmental Services

Figure 2

Vicinity Map

APNs 152-020-010,
152-060-009, 007, & 006
City of Jurupa Valley
Riverside County, CA

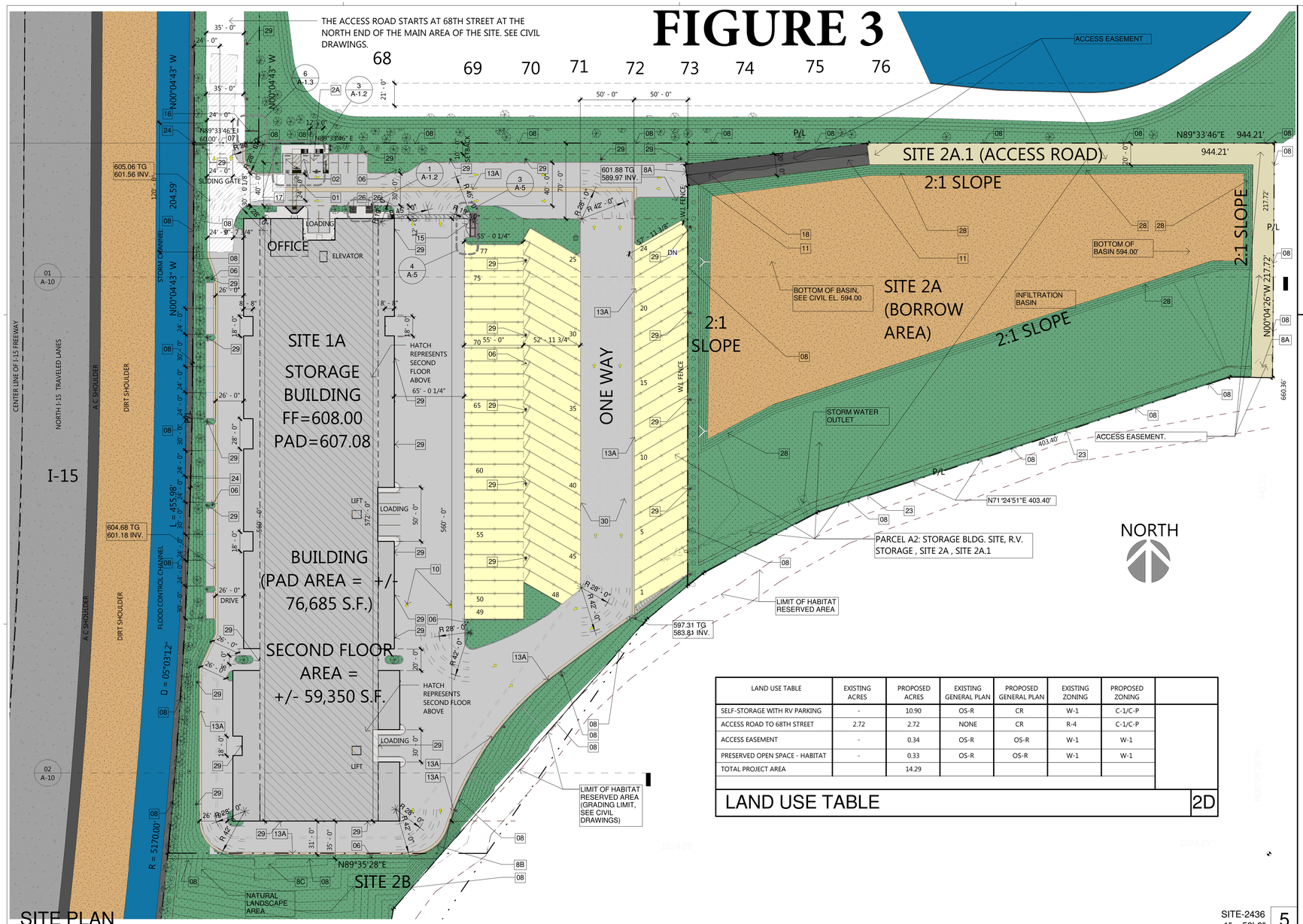
Legend

Project Boundary

N

Hernandez Environmental Services

FIGURE 3



SITE PLAN

SITE-2436
1" = 50'-0"

5

LAND USE TABLE	EXISTING ACRES	PROPOSED ACRES	EXISTING GENERAL PLAN	PROPOSED GENERAL PLAN	EXISTING ZONING	PROPOSED ZONING	
SELF-STORAGE WITH RV PARKING	-	10.90	OS-R	CR	W-1	C-1/C-P	
ACCESS ROAD TO 68TH STREET	2.72	2.72	NONE	CR	R-4	C-1/C-P	
ACCESS EASEMENT	-	0.34	OS-R	OS-R	W-1	W-1	
PRESERVED OPEN SPACE - HABITAT	-	0.33	OS-R	OS-R	W-1	W-1	
TOTAL PROJECT AREA		14.29					

LAND USE TABLE 2D

UTILITIES

SEWER & WATER:
JURUPA COMMUNITY SERVICES DISTRICT
11201 HARREL STREET
MIRA LOMA, CA 91752

GAS:
SOUTHERN CALIFORNIA GAS COMPANY
CENTRALIZED CORRESPONDENCE
P.O. BOX 3150
SAN DIMAS, CA 91773
(800) 427-2000

TELEPHONE:
VERIZON
CUSTOMER SALES & SOLUTIONS CENTER
P.O. BOX 11328
ST. PETERSBURG, FL 33733
(800) 655-4555

ELECTRICAL:
SOUTHERN CALIFORNIA EDISON COMPANY
1351 E. FRANCIS STREET
ONTARIO, CA 91761
(800) 655-4555

CABLE:
VERIZON
CUSTOMER SALES & SOLUTIONS CENTER
P.O. BOX 11328
ST. PETERSBURG, FL 33733
(800) 483-4000

SCHOOL DISTRICT:
JURUPA UNIFIED SCHOOL DISTRICT
4850 PEDLEY ROAD
JURUPA VALLEY, CA 92509
(951) 360-4160

FIRE PROTECTION:
CAL FIRE WEST, RIVERSIDE STATION 18
7545 MISSION BLVD.
JURUPA VALLEY, CA 92509
(951) 685-5260

FENCING:
ENTIRE PROJECT IS FENCED WITH 6 FT CHAINLINK FENCING AND WROUGHT IRON FENCING. AUTOMATIC GATES WILL BE INSTALLED AT DRIVEWAYS INTO SITE.

HAZARD MATERIALS:
NO FLAMMABLE/COMBUSTIBLE LIQUIDS OR WASTE OIL WILL BE STORED ON SITE

FIRE DEPARTMENT NOTES:
PRIOR TO ISSUANCE OF A BUILDING PERMIT THE FOLLOWING SHALL PROVIDED:

FIRE HYDRANTS AND FIRE FLOW:
PROVIDE OR SHOW THERE EXIST FIRE HYDRANT(S) CAPABLE OF DELIVERING FIRE FLOW AS REQUIRED BY CALIFORNIA FIRE CODE AND RIVERSIDE COUNTY FIRE DEPARTMENT STANDARDS WITHIN 400 FEET OF ALL PORTIONS OF ALL STRUCTURES

UTILITIES 2

J. Craig Mann
ARCHITECT
ARCHITECTURE . PLANNING . INTERIOR
1901 NEWPORT BLVD.
SUITE 350
COSTA MESA, CA 92626
JCRAIGM@GMAIL.COM
STUDIOM.JCMA@GMAIL.COM

CLIENT
STEVE GALVEZ

MR. STEVE GALVEZ
20 PASEO VERDE
SAN CLEMENTE, CA 92673
(951) 297-8120
EMAIL: STEVE@STEVEGALVEZ.COM

PROJECT TITLE
R.V. SELF-STORAGE FACILITY

68TH STREET 01-15
JURUPA VALLEY, CA

JURUPA VALLEY, CALIFORNIA

FIGURE 3
SITE PLAN

SIGN BY

LICENSED ARCHITECT
CRAIG MANN
No. C 11330
Exp. 01-31-25
STATE OF CALIFORNIA

DELTA	REVISION	DATE
	ISSUED	06/14/23
	REVISED LIFT AND PLANS	07/27/23
	FIRE TRUCK 'T' TURNING	08/01/23
	UNIT MIXES- SITE	08/15/23
	SITE AND SECTIONS	09/07/23
	REVISION - CORRECTIONS	09/28/23
	REVISION - CIVIL	03/27/24
	REVISION	04/17/24
	EXHIBIT-PROJECT AREA	07/16/24

DATE: 02/18/23
JOB NUMBER 20-848

A-1

CIVIL ENGINEERING (TBD)
W.H. CIVIL
25 MAUCHLY, SUITE 323
IRVINE, CA 92618
1590 OAKLAND ROAD, SUITE B112.
SAN JOSE, CA 95131

ACOUSTICAL ENGINEERING
MD ACOUSTICS (GHG, AQ ENERGY & NOISE)
MIKE DICKERSON
1197 LOS ANGELES AVE, SUITE C-256
SIMI VALLEY, CA 93065
(P) 805-426-4477
MIKE@MDACOUNSTICS.COM

TRAFFIC ENGINEERING
TJW ENGINEERS
THOMAS WHEAT
6 VENTURE, SUITE 265 IRVINE, CA 92618
(P) 949-878-3509
THOMAS@TJWENGINEERING.COM

CULTURAL RESOURCE
CULTURAL RESOURCES CONSULTANT
JEAN A. KELLER, Ph. D.
1042 N. EL CAMINO REAL, SUITE B-244
ENCINITAS, CALIFORNIA 92024
(760) 815-1691
4JAKELLER@GMAIL.COM

HERNANDEZ ENVIRONMENTAL
(GENERAL BIO, JPR & CEQA)
JUAN & SHAWN HERNANDEZ
17037 LAKESHORE DRIVE
LAKE ELSINORE, CA 92530
909-579-1657
JUAN@HERNANDEZENVIRONMENTAL.COM
SHAWN@HERNANDEZENVIRONMENTAL.COM

GEO TECHNICAL REPORT
LGC GEO-ENVIRONMENTAL, INC.
GEOTECHNICAL
ENVIRONMENTAL
METARIALS TESTING
JONATHAN LEVARIO
27570 COMMERCE CENTER DRIVE,
SUITE 128
TEMECULA, CALIFORNIA 92590
PHONE: (951) 297 2450
FAX: (951) 719 2998
WWW.IGCGEOENV.COM
JONATHAN@LGCGEOENV.COM

LANDSCAPE ARCHITECT
ROYAL OAK DESIGNS
SYLVIA LYON
10252 GOLDEN YARROW LANE
ALTA LOMA, CA 91701
909-244-9667
ROYALOAKDESIGN@VERIZON.NET

CONSULTANTS 5

1. SELF-STORAGE WITH R.V. PARKING SITE ONLY: 4'-0" W. MIN. ACCESSIBLE PATH OF TRAVEL. 5% MAX. SLOPE IN TRAVEL DIRECTION AND 2% MAX. CROSS SLOPE.
2. 9'-0" x 18'-0" ACCESSIBLE PARKING WITH 8'-0" WIDE LOADING. 2A. 12'-0" x 18'-0" ACCESSIBLE EV CHARGING ONLY WITH 5'-0" WIDE LOADING
3. (2) 12'-0" W. x 6'-0" W.I. SWINGING GATE WITH MOTOR WITH KNOX BOX FOR FIRE DEPARTMENT 4. LANDSCAPING
5. KEY KNOX BOX MOUNTED AT ROLLING GATE. PROVIDE KEY TO THE GATE AND THE BUILDING ENTRANCE.
6. FIRE HYDRANT LOCATION
7. 24'-0" W. x 6'-0" H. POWER OPERATED SLIDING GATE WITH KNOX BOX PER FIRE DEPARTMENT.
8. 6' H. W.I. FENCE 8A. 20'-0" x 6'-0" W.I. SWINGING GATE WITH KNOX BOX
8B. 4'-0" H. RETAINING WALL, SEE CIVIL
8C. 16'-0" x 6'-0" W.I. SWINGING GATE WITH KNOX BOX
9. ENTRY SIGN 10. PAINTED DIRECTIONAL ARROW ON PAVING.
11. 20'-0" ACCESS ROAD. RAMP SLOPE TO BE 4 % 12. LOW AND HIGH KEYPAD.
13. ACCESSIBLE SIGN AT ENTRY DRIVE. 13A. CONCRETE GUTTER, SEE CIVIL DRAWINGS
14. 25'-0" SETBACK LINE AT PROPERTY FACING STREET.
15. TRASH ENCLOSURE
16. MONUMENT SIGN. MONUMENT SIGN AND ANY OTHER SIGNAGE OR FREE STANDING SIGN TO BE SUBMITTED UNDER SEPARATE PERMIT.
17. FLAG POLE. 35'-0" H. MAX.
18. 20'-0" WIDE DRIVE RAMP WITH 10 PERCENT SLOPE (170'-0" MIN. LONG FOR 17'-0" H.)
19. 4 HR. SEPARATION WALL, 2'-6" MIN. EXTENDS ABOVE ADJACENT ROOF.
20. METAL STANDING SEAM ROOF. 21. DUMP STATION.
22. PROPOSED DETENTION BASIN. DEEP. SEE CIVIL DRAWING.
23. 6'-0" H. CONCRETE BLOCK RETAINING WALL. SEE CIVIL DRAWINGS
24. FENCE AT PROPERTY LINE. SEE CIVIL
25. 3 HR. RATED WALL WITH PARAPET EXTENDS 2'-6" MIN. OVER ROOF TO PROVIDE BUILDING SEPARATION AREAS UNDER 47,100 S.F. PER FIRE DEPARTMENT REQUIREMENT.
26. SITE BICYCLE RACK OR BICYCLE SPACES
27. 17'-0" TO 20'-0" H. 2:1 SLOPE. SEE CIVIL DRAWINGS. 28. 2:1 SLOPE
29. SITE LIGHTING. SEE PHOTOMETRIC PLAN. 30. DRAINAGE SYSTEM, SEE CIVIL

SITE PLAN KEY NOTES 4

SCOPE OF WORK: NEW SELF-STORAGE FACILITY. THE TOTAL SITE CONSISTS OF 14.29 ACRES AS FOLLOWS:
APN 152-020-010 & APN 152-060-009.....2.72 ACRES (ACCESS ROAD FROM 68 STREET)
APN 152-060-007
SITE AREA : +/-474,804 S.F., 10.90 ACRES (SELF-STORAGE WITH R.V. PARKING, & A PART OF EASEMENT).
SELF-STORAGE & R.V. STORAGE SITE :
SITE AREA 1A = +/- 329,749 SF (7.57 ACRES) (BUILDING & R.V. SITE AND MISC.)
SITE 2A (BORROWED AREA) = 144,982 SF(3.33 ACRES),
SITE 2A.1 ACCESS EASEMENT = 14,873 (0.34 ACRE.)
SITE 2B = 14,375 SF(0.33 ACRES)(NATURAL LANDSCAPE)
(E) ZONING : W-1, PROPOSED ZONING: C-1/C-P AND W-1
USE GOUP-OCCUPANCY : B - OFFICE, S1- STORAGE
FLOOD ZONE: AE ZONE AND FLOODWAY, CONSTRUCTION TYPE: II-A; SPRINKLER: YES, SPRINKLERED
STORY: TWO STORIES FOR STORAGE, ONE STORY FOR OFFICE, STREET SETBACK = 25'-0"
BUILDING COVERAGE = 76,685 S.F. (23.26 %) (TOTAL BUILT-OUT BASED ON SITE AREA 1A)
LANDSCAPE AREA = 25,688 S.F. (7.79 %) (ESTIMATED)
PAVEMENT AREA & SOIL (MISC.) = 227,376 S.F. (68.95 %)
(BASED ON SITE AREA 1A = 329,749 SF = 7.57 ACRES)
FLOOR AREAS:
OFFICE.....670 S.F.
STORAGE FIRST FLOOR.....76,015 S.F. (UNLIMITED S.F. PER CBC TABLE 506.2 OR 507.4)
SECOND FLOOR.....59,350 S.F. (UNLIMITED S.F. PER CBC TABLE 506.2 OR 507.4)
TOTAL.....136,035 S.F. (EST.)
STORAGE AREA.....135,365 S.F.
(TYPE II-A, SPRINKLERED BUILDING WITH 2 STORIES PER CBC TABLE 506.2,
EXTERIOR AND INTERIOR BEARING WALLS TO BE 1 HR RATED PER CBC TABLE 601,
FLOOR AND ASSOCIATED SECONDARY MEMBERS TO BE 1 HR RATED PER CBC TABLE 601)

TOTAL PARKING REQUIRED: 4+6+11 =21 SPACES INCLUDING 2 ADA ACCESS. SPACES
PROVIDED: (6) 9'X18' SPACES INCLUDING 2 ADA ACCESSIBLE PARKING, (1) 12'-0" x 18'-0" ACCESSIBLE EV CHARGING ONLY AND (12) 9'X24' PARALLEL PARKING AND (8) LOADING SPACES
= (19) PARKING SPACES AND (8) LOADING SPACES
R.V. STORAGE SITE: R.V. PARKING SPACES: +/- 77 SPACES (12' x 50' & 12' x 55')

PROJECT DATA 3

LEGAL DESCRIPTION:
APN: 152-020-010 (1.83 AC.); 152-060-007 (15.13 AC.); 152-060-009 (0.91 AC.) AND A PORTION OF 006
TOWNSHIP 2 SOUTH, RANGE 6 WEST, SECTIONS 30 & 31, SBM
USGS CORONA NORTH, CALIFORNIA QUADRANGLE, 7.5; SERIES

LEGAL DESCRIPTIONS 2A

STEVE GALVEZ
20 PASEO VERDE
SAN CLEMENTE, CA 92673
Mr. CONTACT PERSON
STEVE GALVEZ
951-297-8120
EMAIL:
STEVE@STEVEGALVEZ.COM

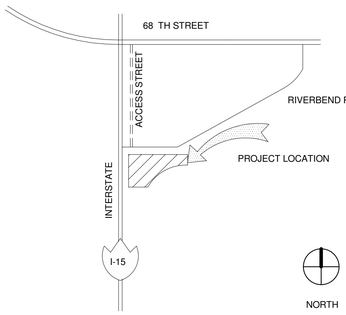
OWNERS 2B

INDEX

TABLE PARKING REQUIREMENT 2C

USE	PROPOSED SIZE	CODE REQUIREMENT	REQUIRED SPACE
OFFICE (670 S.F.)	670 S.F.	1 SPACE PER EVERY 200 SQUARE FEET OF NET LEASEABLE FLOOR AREA	3.35 OR 4
STORAGE (135,365 S.F.)	8 EMPLOYEES	2 SPACES PER 3 EMPLOYEES	5.3 OR 6
STORAGE YARD (53,539 S.F.)	(53,539 S.F.)	1 SPACE PER EACH 5,000 SQUARE FEET OF LOT AREA	10.7 OR 11
STORAGE YARD(R.V. AREA 1 + R.V. AREA 2 = 53,539 S.F.)		TOTAL	21

VICINITY MAP N.T.S. 1



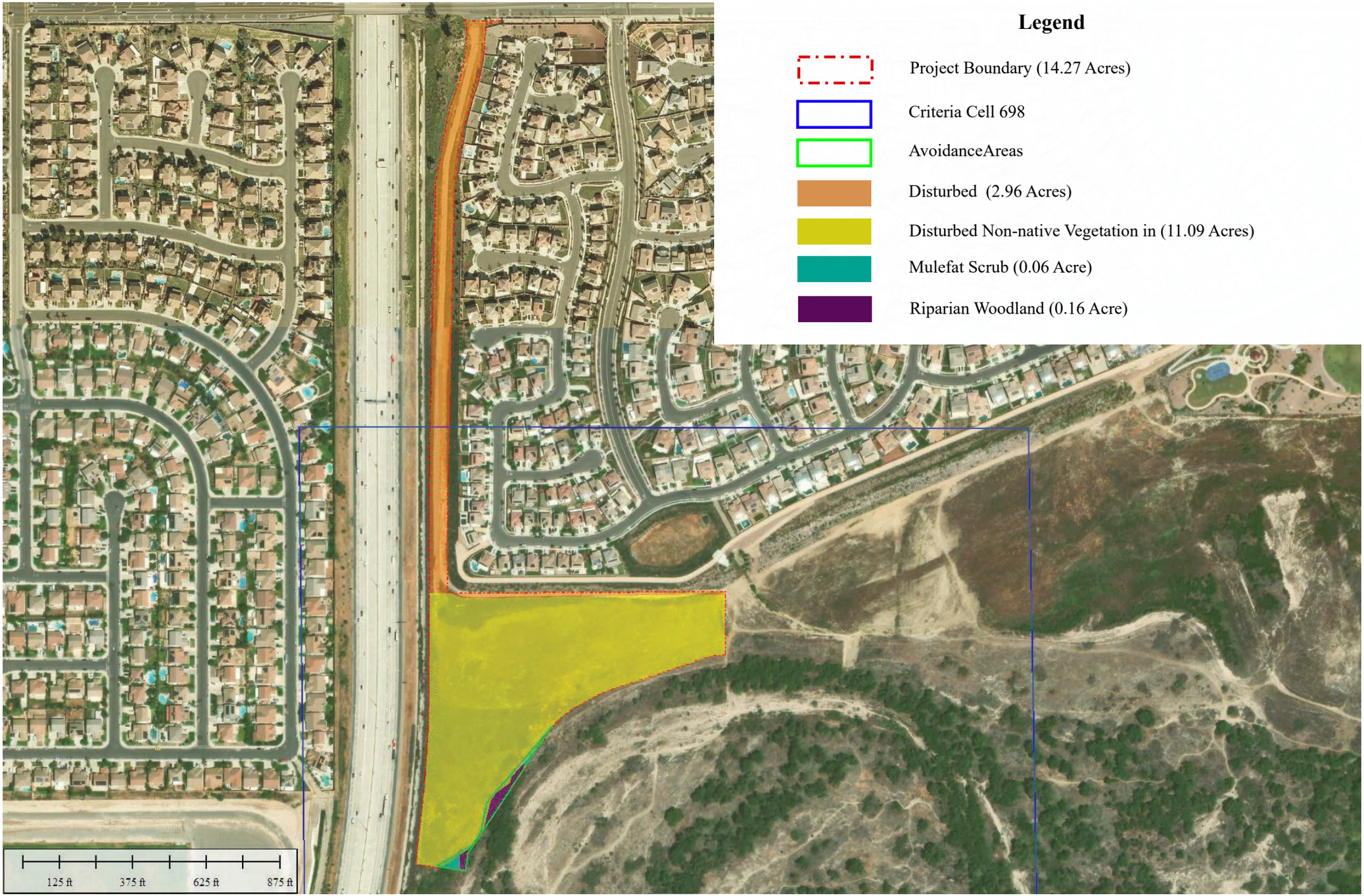


Figure 4

Habitat Map

APNs 152-020-010,
152-060-009, 007, & 006
City of Jurupa Valley
Riverside County, CA

N

Hernandez Environmental Services

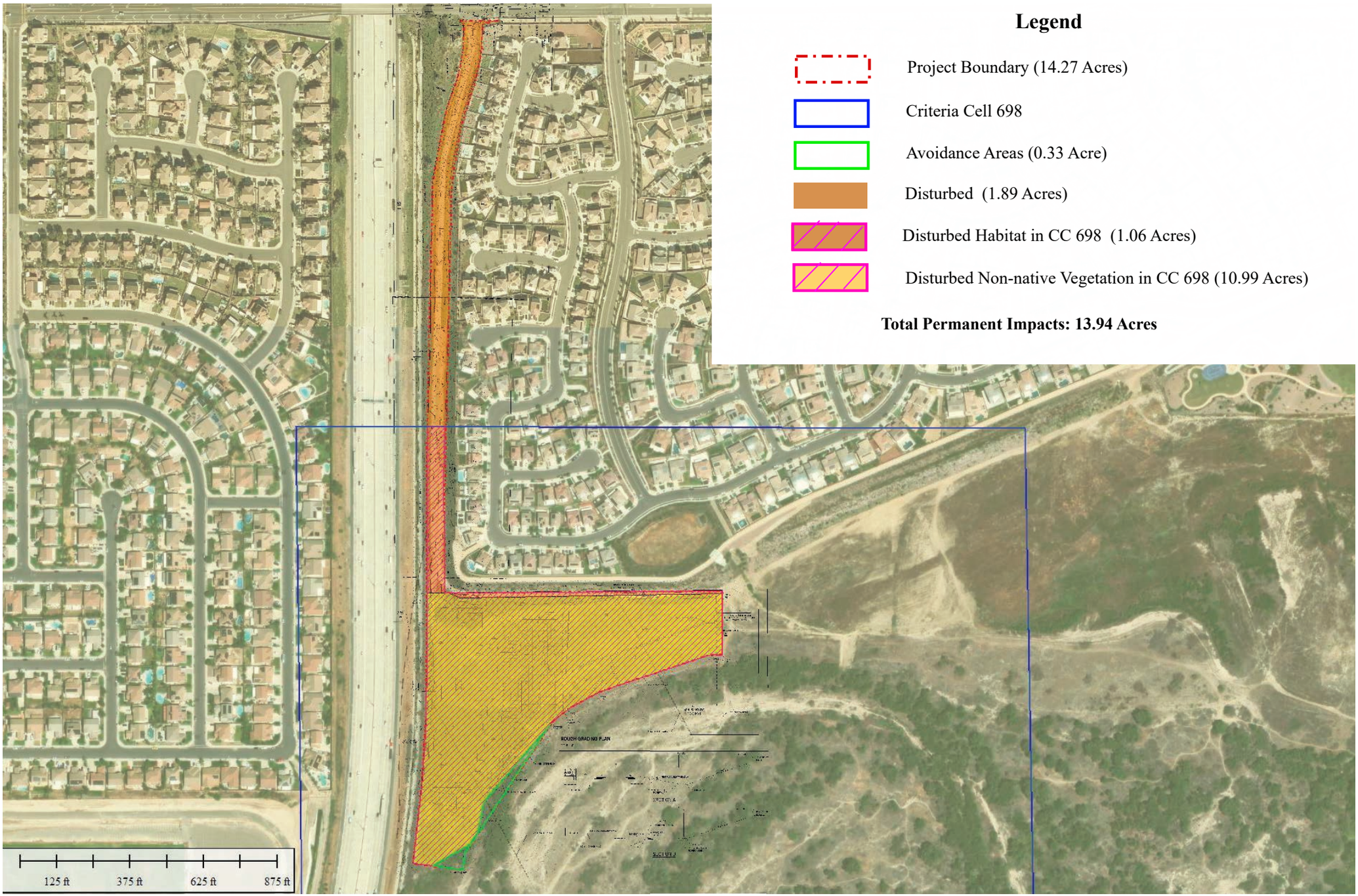


Figure 5

Impacts Map
APNs 152-020-010,
152-060-009, 007, & 006
City of Jurupa Valley
Riverside County, CA

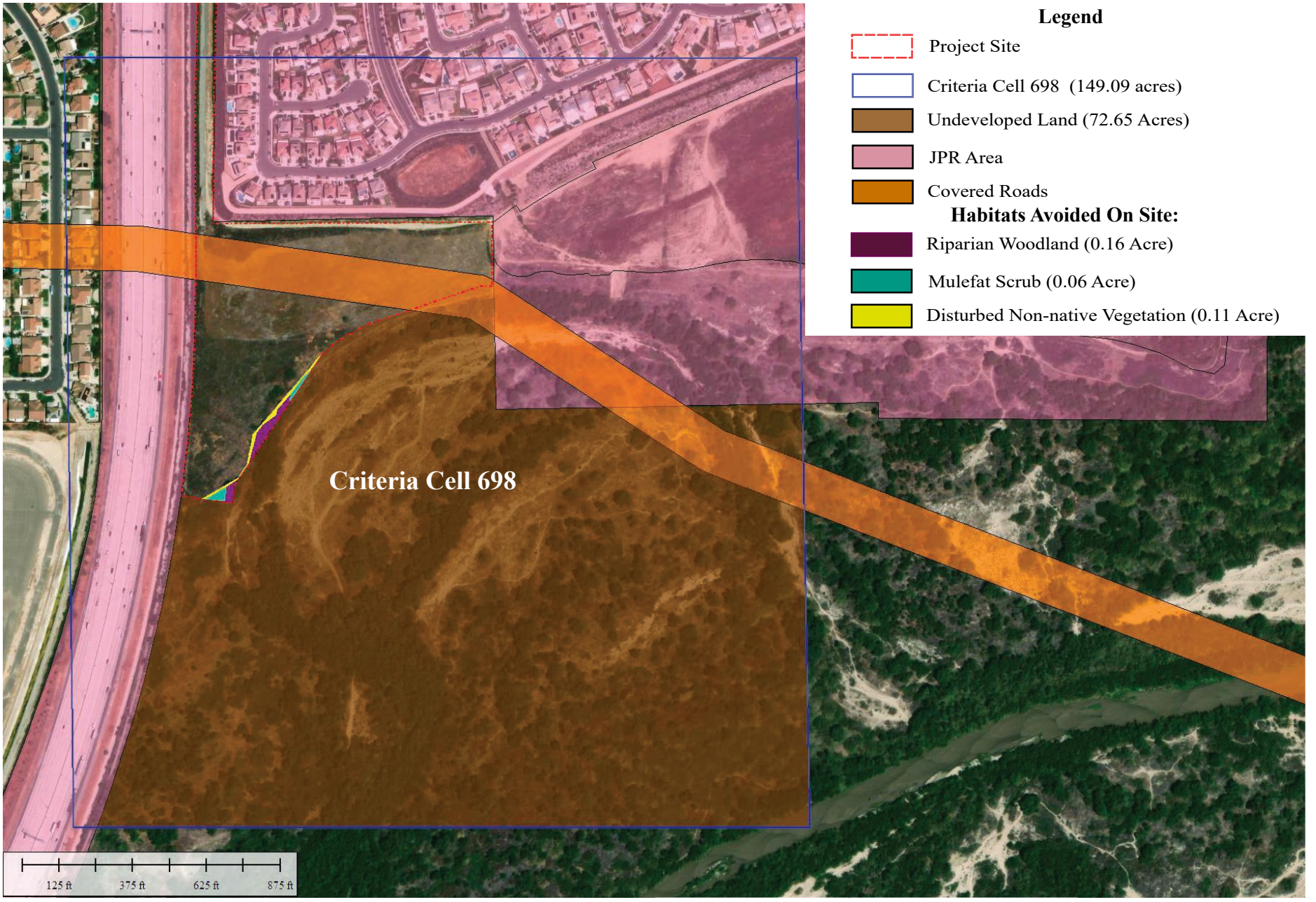


Figure 6

Reserve Assembly Analysis Map
Criteria Cell 698
Riverside County, California

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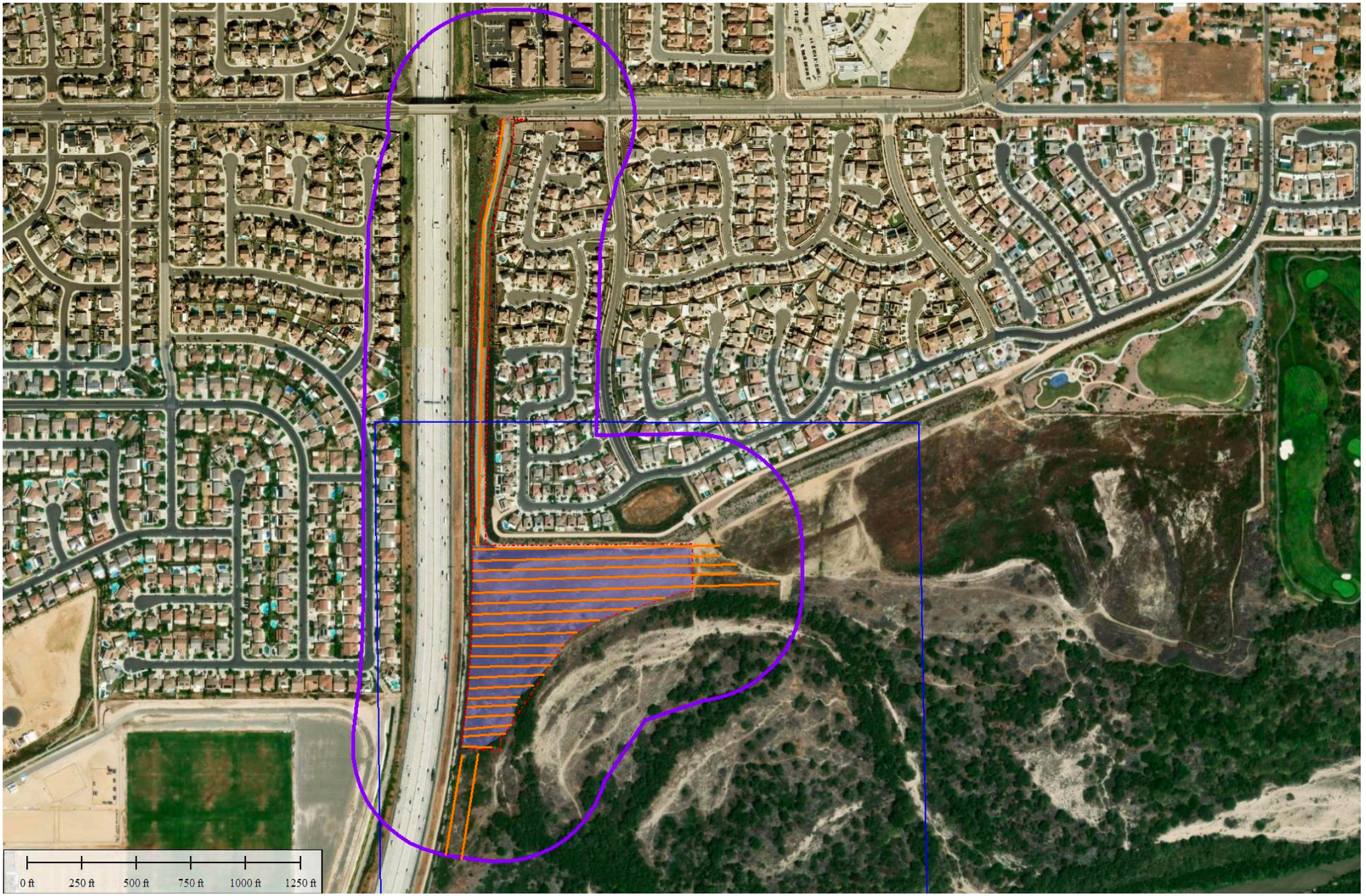
Hernandez Environmental Services



Legend

Project Boundary (14.39 Acres)

Criteria Cell 698

500 Foot Buffer

Suitbale Burrowing Owl Habitat

Transect

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Figure 7

BUOW Habitat Assessment Map

APNs 152-020-010,
152-060-009, 007, & 006
City of Jurupa Valley
Riverside County, CA

Figure 8

Section 6.1.2 MSHCP Riparian/Riverine Resources Map
Criteria Cell 698
Riverside County, California

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APPENDIX A

Species List

Plant List

Ailanthus altissima	Tree of heaven
Artemisia californica	California sage
Atriplex canescens	Four-winged saltbush
Baccharis salicifolia	Mule fat
Battarrea phalloides	Sandy Stilt-puffball
Brassica nigra	Black mustard
Bromus sp.	Bromus sp.
Chenopodium strictum car. Glaucophyllum	White leaved goosefoot
Datura wrightii	Jimsonweed
Erigeron canadensis	Canadian horseweed
Eriogonum fasciculatum	California buckwheat
Helianthus californicus	California sunflower
Heliotropium curassavicum	Salt heliotrope
Hirschfeldia incana	Mustard
Kochia scoparia	Summer cypress
Lactuca serriola	Prickly lettuce
Lepidium latifolium	Perennial pepperweed
Lepidospartum squamatum	Scalebroom
Nicotiana glauca	Tree tobacco
Oncosiphon piluliferum	Stinknet
Phacelia cicutaria var. hispida	Caterpillar phacelia
Pluchea sericea	Arrowweed
Populus fremontii	Fremont cottonwood
Salix exigua	Narrow-leaf willow
Salix laevigata	Red willow
Salix lasiolepis	Arroyo willow
Salsola tragus	Russian thistle

Sambucus melanocarpa	Black elderberry
Tamarix ramosissima	Tamarisk
Verbesina encelioides	Golden crownbeard

Animal List

Buteo jamaicensis	Red-tailed hawk
Calypte anna	Anna's hummingbird
Canis latrans	Coyote
Corvus brachyrhynchos	American crow
Falco sparverius	American kestrel
Haemorhous mexicanus	House finch
Melozone crissalis	California towhee
Otospermophilus beecheyi	California ground squirrel
Passer domesticus	House sparrow
Sayornis nigricans	Black phoebe
Spinus lawrencei	Lawrence's goldfinch
Sturnella neglecta	Western meadowlark
Sylvilagus audubonii	Desert cottontail rabbit
Zenaida macroura	Mourning dove
Zonotrichia leucophrys	White-crowned sparrow

APPENDIX B

Scientific Name	Common Name	Taxon Group	Federal List	State List	R Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Abronia villosa var. aurita	chaparral sand-verbena	Dicots	None	None	1B.1	Chaparral | Coastal scrub | Desert dunes	Chaparral, coastal scrub, desert dunes.	Sandy areas. -60-1570 m.	No suitable habitat present on the project site. **This species is not present.**
Allium munzii	Munz's onion	Monocots	Endangered	Threatened	1B.1	Chaparral | Cismontane woodland | Coastal scrub | Pinon & juniper woodlands | Valley & foothill grassland	Chaparral, coastal scrub, cismontane woodland, pinyon and juniper woodland, valley and foothill grassland.	Heavy clay soils; grows in grasslands & openings within shrublands or woodlands. 375-1040 m.	No suitable habitat present on the project site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	R Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Ambrosia pumila	San Diego ambrosia	Dicots	Endangered	None	1B.1	Chaparral | Coastal scrub | Valley & foothill grassland	Chaparral, coastal scrub, valley and foothill grassland.	Sandy loam or clay soil; sometimes alkaline. In valleys; persists where disturbance has been superficial. Sometimes on margins or near vernal pools. 3-580 m.	This species is within a NEPSSA survey area under the MSHCP. No habitat is present on the project site. **This species is not present.**
Arenaria paludicola	marsh sandwort	Dicots	Endangered	Endangered	1B.1	Freshwater marsh | Marsh & swamp | Wetland	Marshes and swamps.	Growing up through dense mats of Typha, Juncus, Scirpus, etc. in freshwater marsh. Sandy soil. 3-170 m.	No suitable habitat present on the project site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	R Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Astragalus brauntonii	Braunton's milk-vetch	Dicots	Endangered	None	1B.1	Chaparral | Coastal scrub | Limestone | Valley & foothill grassland	Chaparral, coastal scrub, valley and foothill grassland.	Recent burns or disturbed areas; usually on sandstone with carbonate layers. Soil specialist; requires shallow soils to defeat pocket gophers and open areas, preferably on hilltops, saddles or bowls between hills. 3-640 m.	No suitable habitat present on the project site. **This species is not present.**
Atriplex coulteri	Coulter's saltbush	Dicots	None	None	1B.2	Coastal bluff scrub | Coastal dunes | Coastal scrub | Valley & foothill grassland	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland.	Ocean bluffs, ridgetops, as well as alkaline low places. Alkaline or clay soils. 2-460 m.	No suitable habitat present on the project site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	R Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Baccharis malibuensis	Malibu baccharis	Dicots	None	None	1B.1	Chaparral | Cismontane woodland | Coastal scrub | Riparian woodland	Coastal scrub, chaparral, cismontane woodland, riparian woodland.	In Conejo volcanic substrates, often on exposed roadcuts. Sometimes occupies oak woodland habitat. 150-320 m.	No suitable soils occur on the project site. **This species is not present.**
Berberis nevinii	Nevin's barberry	Dicots	Endangered	Endangered	1B.1	Chaparral | Cismontane woodland | Coastal scrub | Riparian scrub	Chaparral, cismontane woodland, coastal scrub, riparian scrub.	On steep, N-facing slopes or in low grade sandy washes. 90-1590 m.	Suitable habitat present on the project site. **This species has the potential to be present.**
California Walnut Woodland	California Walnut Woodland	Woodland	None	None		Cismontane woodland			**Not present on the project site.**
Calochortus plummerae	Plummer's mariposa-lily	Monocots	None	None	4.2	Chaparral | Cismontane woodland | Coastal scrub | Lower montane coniferous forest | Valley & foothill grassland	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest.	Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. 60-2500 m.	No suitable habitat present on the project site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	R Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Calochortus weedii var. intermedius	intermediate mariposa-lily	Monocots	None	None	1B.2	Chaparral | Coastal scrub | Valley & foothill grassland	Coastal scrub, chaparral, valley and foothill grassland.	Dry, rocky calcareous slopes and rock outcrops. 60-1575 m.	No suitable habitat present on the project site. **This species is not present.**
Calystegia felix	lucky morning-glory	Dicots	None	None	1B.1	Meadow & seep | Riparian scrub	Meadows and seeps, riparian scrub.	Sometimes alkaline, alluvial. 9-205 m.	Suitable habitat present on the project site. **This species has the potential to be present.**
Centromadia pungens ssp. laevis	smooth tarplant	Dicots	None	None	1B.1	Alkali playa | Chenopod scrub | Meadow & seep | Riparian woodland | Valley & foothill grassland | Wetland	Valley and foothill grassland, chenopod scrub, meadows and seeps, playas, riparian woodland.	Alkali meadow, alkali scrub; also in disturbed places. 5-1170 m.	Suitable habitat present on the project site. **This species has the potential to be present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	R Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	Dicots	Endangered	Endangered	1B.2	Coastal dunes | Marsh & swamp | Salt marsh | Wetland	Marshes and swamps, coastal dunes.	Limited to the higher zones of salt marsh habitat. 0-10 m.	No suitable habitat present on the project site. **This species is not present.**
Chorizanthe parryi var. fernandina	San Fernando Valley spineflower	Dicots	None	Endangered	1B.1	Coastal scrub | Valley & foothill grassland	Coastal scrub, valley and foothill grassland.	Sandy soils. 15-1015 m.	No suitable habitat present on the project site. **This species is not present.**
Chorizanthe parryi var. parryi	Parry's spineflower	Dicots	None	None	1B.1	Chaparral | Cismontane woodland | Coastal scrub | Valley & foothill grassland	Coastal scrub, chaparral, cismontane woodland, valley and foothill grassland.	Dry slopes and flats; sometimes at interface of 2 vegetation types, such as chaparral and oak woodland. Dry, sandy soils. 90-1220 m.	No suitable habitat present on the project site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	R Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Chorizanthe polygonoides var. longispina	long-spined spineflower	Dicots	None	None	1B.2	Chaparral | Coastal scrub | Meadow & seep | Ultramafic | Valley & foothill grassland | Vernal pool	Chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, vernal pools.	Gabbroic clay. 30-1630 m.	No suitable habitat present on the project site. **This species is not present.**
Cladium californicum	California saw-grass	Monocots	None	None	2B.2	Alkali marsh | Freshwater marsh | Meadow & seep | Wetland	Meadows and seeps, marshes and swamps (alkaline or freshwater).	Freshwater or alkaline moist habitats. -20-2135 m.	No suitable habitat present on the project site. **This species is not present.**
Dodecahema leptoceras	slender-horned spineflower	Dicots	Endangered	Endangered	1B.1	Chaparral | Cismontane woodland | Coastal scrub	Chaparral, cismontane woodland, coastal scrub (alluvial fan sage scrub).	Flood deposited terraces and washes; associates include Encelia, Dalea, Lepidospartum, etc. Sandy soils. 200-765 m.	No suitable habitat present on the project site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	R Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Dudleya multicaulis	many-stemmed dudleya	Dicots	None	None	1B.2	Chaparral | Coastal scrub | Valley & foothill grassland	Chaparral, coastal scrub, valley and foothill grassland.	In heavy, often clayey soils or grassy slopes. 1-910 m.	No suitable habitat present on the project site. **This species is not present.**
Eriastrum densifolium ssp. sanctorum	Santa Ana River woollystar	Dicots	Endangered	Endangered	1B.1	Chaparral | Coastal scrub	Coastal scrub, chaparral.	In sandy soils on river floodplains or terraced fluvial deposits. 180-705 m.	No suitable habitat present on the project site. **This species is not present.**
Harpagonella palmeri	Palmer's grapplinghook	Dicots	None	None	4.2	Chaparral | Coastal scrub | Valley & foothill grassland	Chaparral, coastal scrub, valley and foothill grassland.	Clay soils; open grassy areas within shrubland. 20-955 m.	No suitable habitat present on the project site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	R Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Hesperocyparis forbesii	Tecate cypress	Gymnosperms	None	None	1B.1	Chaparral | Closed-cone coniferous forest	Closed-cone coniferous forest, chaparral.	Primarily on north-facing slopes; groves often associated with chaparral. On clay or gabbro. 60-1650 m.	No suitable habitat present on the project site. **This species is not present.**
Horkelia cuneata var. puberula	mesa horkelia	Dicots	None	None	1B.1	Chaparral | Cismontane woodland | Coastal scrub	Chaparral, cismontane woodland, coastal scrub.	Sandy or gravelly sites. 15-1645 m.	No suitable habitat present on the project site. **This species is not present.**
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	Dicots	None	None	1B.1	Alkali playa | Marsh & swamp | Salt marsh | Vernal pool | Wetland	Coastal salt marshes, playas, vernal pools.	Usually found on alkaline soils in playas, sinks, and grasslands. 1-1375 m.	No suitable habitat present on the project site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	R Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Lepechinia cardiophylla	heart-leaved pitcher sage	Dicots	None	None	1B.2	Chaparral | Cismontane woodland | Closed-cone coniferous forest	Closed-cone coniferous forest, chaparral, cismontane woodland.	115-1345 m.	No suitable habitat present on the project site. **This species is not present.**
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	Dicots	None	None	4.3	Chaparral | Coastal scrub	Chaparral, coastal scrub.	Dry soils, shrubland. 4-1435 m.	No suitable habitat present on the project site. **This species is not present.**
Lycium parishii	Parish's desert-thorn	Dicots	None	None	2B.3	Coastal scrub | Sonoran desert scrub	Coastal scrub, Sonoran desert scrub.	-3-570 m.	No suitable habitat present on the project site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	R Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Malacothamnus parishii	Parish's bush-mallow	Dicots	None	None	1A	Chaparral | Coastal scrub	Chaparral, coastal sage scrub.	In a wash. 305-455 m.	No suitable habitat present on the project site. **This species is not present.**
Monardella australis ssp. jokerstii	Jokerst's monardella	Dicots	None	None	1B.1	Chaparral | Lower montane coniferous forest	Lower montane coniferous forest, chapparal.	Steep scree or talus slopes between breccia. Secondary alluvial benches along drainages and washes. 210-1740 m.	No suitable habitat present on the project site. **This species is not present.**
Monardella hypoleuca ssp. intermedia	intermediate monardella	Dicots	None	None	1B.3	Chaparral | Cismontane woodland | Lower montane coniferous forest	Chaparral, cismontane woodland, lower montane coniferous forest (sometimes).	Often in steep, brushy areas. 195-1675 m.	No suitable habitat present on the project site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	R Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Monardella pringlei	Pringle's monardella	Dicots	None	None	1A	Coastal scrub	Coastal scrub.	Sandy hills. 300-400 m.	No suitable habitat present on the project site. **This species is not present.**
Muhlenbergia californica	California muhly	Monocots	None	None	4.3	Chaparral | Coastal scrub | Lower montane coniferous forest | Meadow & seep	Coastal scrub, chaparral, lower montane coniferous forest, meadows and seeps.	Usually found near streams or seeps. 100-2000 m.	No suitable habitat present on the project site. **This species is not present.**
Muhlenbergia utilis	aparejo grass	Monocots	None	None	2B.2	Chaparral | Cismontane woodland | Coastal scrub | Marsh & swamp | Meadow & seep | Ultramafic	Meadows and seeps, marshes and swamps, chaparral, coastal scrub, cismontane woodland.	Sometimes alkaline, sometimes serpentinite. 25-2325 m.	No suitable habitat present on the project site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	R Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Navarretia prostrata	prostrate vernal pool navarretia	Dicots	None	None	1B.2	Coastal scrub | Meadow & seep | Valley & foothill grassland | Vernal pool | Wetland	Coastal scrub, valley and foothill grassland, vernal pools, meadows and seeps.	Alkaline soils in grassland, or in vernal pools. Mesic, alkaline sites. 3-1235 m.	No suitable habitat present on the project site. **This species is not present.**
Nolina cismontana	chaparral nolina	Monocots	None	None	1B.2	Chaparral | Coastal scrub | Ultramafic	Chaparral, coastal scrub.	Primarily on sandstone and shale substrates; also known from gabbro. 140-1100 m.	No suitable habitat present on the project site. **This species is not present.**
Penstemon californicus	California beardtongue	Dicots	None	None	1B.2	Chaparral | Lower montane coniferous forest | Pinon & juniper woodlands	Chaparral, lower montane coniferous forest, pinyon and juniper woodland.	Stony slopes and shrubby openings; sandy or granitic soils. 240-2290 m.	No suitable habitat present on the project site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	R Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Pentachaeta aurea ssp. allenii	Allen's pentachaeta	Dicots	None	None	1B.1	Coastal scrub | Valley & foothill grassland	Valley and foothill grasslands, coastal scrub.	Openings in scrub or grassland. 75-520 m.	No suitable habitat present on the project site. **This species is not present.**
Phacelia keckii	Santiago Peak phacelia	Dicots	None	None	1B.3	Chaparral | Closed-cone coniferous forest	Closed-cone coniferous forest, chaparral.	Open areas, sometimes along creeks. 545-1525 m.	No suitable habitat present on the project site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	R Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Phacelia stellaris	Brand's star phacelia	Dicots	None	None	1B.1	Coastal dunes | Coastal scrub	Coastal scrub, coastal dunes.	Open areas. 3-370 m.	This species is within a NEPSSA survey area under the MSHCP. No habitat is present on the project site. **This species is not present.**
Pseudognaphalium leucocephalum	white rabbit-tobacco	Dicots	None	None	2B.2	Chaparral | Cismontane woodland | Coastal scrub | Riparian woodland	Riparian woodland, cismontane woodland, coastal scrub, chaparral.	Sandy, gravelly sites. 35-515 m.	Suitable habitat present on the project site. **This species has the potential to be present.**
Riversidian Alluvial Fan Sage Scrub	Riversidian Alluvial Fan Sage Scrub	Scrub	None	None		Coastal scrub			**Not present on the project site.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	R Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Senecio aphanactis	chaparral ragwort	Dicots	None	None	2B.2	Chaparral | Cismontane woodland | Coastal scrub	Chaparral, cismontane woodland, coastal scrub.	Drying alkaline flats. 20-1020 m.	No suitable habitat present on the project site. **This species is not present.**
Sidalcea neomexicana	salt spring checkerbloom	Dicots	None	None	2B.2	Alkali playa | Chaparral | Coastal scrub | Lower montane coniferous forest | Mojavean desert scrub | Wetland	Playas, chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub.	Alkali springs and marshes. 3-2380 m.	No suitable habitat present on the project site. **This species is not present.**
Southern California Arroyo Chub/Santa Ana Sucker Stream	Southern California Arroyo Chub/Santa Ana Sucker Stream	Inland Waters	None	None					**Not present on the project site.**
Southern Coast Live Oak Riparian Forest	Southern Coast Live Oak Riparian Forest	Riparian	None	None		Riparian forest			**Not present on the project site.**
Southern Cottonwood Willow Riparian Forest	Southern Cottonwood Willow Riparian Forest	Riparian	None	None		Riparian forest			**Present**

Scientific Name	Common Name	Taxon Group	Federal List	State List	R Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Southern Interior Cypress Forest	Southern Interior Cypress Forest	Forest	None	None		Closed-cone coniferous forest			**Not present on the project site.**
Southern Riparian Forest	Southern Riparian Forest	Riparian	None	None		Riparian forest			**Not present on the project site.**
Southern Riparian Scrub	Southern Riparian Scrub	Riparian	None	None		Riparian scrub			**Not present on the project site.**
Southern Sycamore Alder Riparian Woodland	Southern Sycamore Alder Riparian Woodland	Riparian	None	None		Riparian woodland			**Not present on the project site.**
Southern Willow Scrub	Southern Willow Scrub	Riparian	None	None		Riparian scrub			**Not present on the project site.**
Sphenopholis obtusata	prairie wedge grass	Monocots	None	None	2B.2	Cismontane woodland | Meadow & seep | Wetland	Cismontane woodland, meadows and seeps.	Open moist sites, along rivers and springs, alkaline desert seeps. 15-2625 m.	No suitable habitat present on the project site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	R Plant Rank	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Symphyotrichum defoliatum	San Bernardino aster	Dicots	None	None	1B.2	Cismontane woodland | Coastal scrub | Lower montane coniferous forest | Marsh & swamp | Meadow & seep | Valley & foothill grassland	Meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, valley and foothill grassland.	Vernally mesic grassland or near ditches, streams and springs; disturbed areas. 3-2045 m.	No suitable habitat present on the project site. **This species is not present.**
Thysanocarpus rigidus	rigid fringepod	Dicots	None	None	1B.2	Pinon & juniper woodlands	Pinyon and juniper woodland.	Dry, rocky slopes and ridges of oak and pine woodland in arid mountain ranges. 425-2165	No suitable habitat present on the project site. **This species is not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Accipiter cooperii	Cooper's hawk	Birds	None	None	Cismontane woodland | Riparian forest | Riparian woodland | Upper montane coniferous forest	Woodland, chiefly of open, interrupted or marginal type.	Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.	No suitable habitat is present on the project site. This species is **not present.**
Agelaius tricolor	tricolored blackbird	Birds	None	Threatened	Freshwater marsh | Marsh & swamp | Swamp | Wetland	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California.	Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	No suitable habitat is present on the project site. This species is **not present.**
Aimophila ruficeps canescens	southern California rufous-crowned sparrow	Birds	None	None	Chaparral | Coastal scrub	Resident in Southern California coastal sage scrub and sparse mixed chaparral.	Frequents relatively steep, often rocky hillsides with grass and forb patches.	No suitable habitat is present on the project site. This species is **not present.**
Ammodramus savannarum	grasshopper sparrow	Birds	None	None	Valley & foothill grassland	Dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes.	Favors native grasslands with a mix of grasses, forbs and scattered shrubs. Loosely colonial when nesting.	No suitable habitat is present on the project site. This species is **not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Anaxyrus californicus	arroyo toad	Amphibians	Endangered	None	Desert wash | Riparian scrub | Riparian woodland | South coast flowing waters | South coast standing waters	Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc.	Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range.	No suitable habitat is present on the project site. This species is **not present.**
Anniella stebbinsi	Southern California legless lizard	Reptiles	None	None	Broadleaved upland forest | Chaparral | Coastal dunes | Coastal scrub	Generally south of the Transverse Range, extending to northwestern Baja California. Occurs in sandy or loose loamy soils under sparse vegetation. Disjunct populations in the Tehachapi and Piute Mountains in Kern County.	Variety of habitats; generally in moist, loose soil. They prefer soils with a high moisture content.	No suitable habitat is present on the project site. This species is **not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Antrozous pallidus	pallid bat	Mammals	None	None	Chaparral | Coastal scrub | Desert wash | Great Basin grassland | Great Basin scrub | Mojavean desert scrub | Riparian woodland | Sonoran desert scrub | Upper montane coniferous forest | Valley & foothill grassland	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting.	Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	No suitable habitat is present on the project site. This species is **not present.**
Aquila chrysaetos	golden eagle	Birds	None	None	Broadleaved upland forest | Cismontane woodland | Coastal prairie | Great Basin grassland | Great Basin scrub | Lower montane coniferous forest | Pinon & juniper woodlands | Upper montane coniferous forest | Valley & foothill grassland	Rolling foothills, mountain areas, sage-juniper flats, and desert.	Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	No suitable habitat is present on the project site. This species is **not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Arizona elegans occidentalis	California glossy snake	Reptiles	None	None		Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California.	Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	No suitable habitat is present on the project site. This species is **not present.**
Artemisiospiza belli belli	Bell's sage sparrow	Birds	None	None	Chaparral | Coastal scrub	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range.	Nest located on the ground beneath a shrub or in a shrub 6-18 inches above ground. Territories about 50 yds apart.	No suitable habitat is present on the project site. This species is **not present.**
Asio otus	long-eared owl	Birds	None	None	Cismontane woodland | Great Basin scrub | Riparian forest | Riparian woodland | Upper montane coniferous forest	Riparian bottomlands grown to tall willows and cottonwoods; also, belts of live oak paralleling stream courses.	Require adjacent open land, productive of mice and the presence of old nests of crows, hawks, or magpies for breeding.	Suitable habitat is present on site. **This species has the potential to be present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Aspidoscelis hyperythra	orange-throated whiptail	Reptiles	None	None	Chaparral | Cismontane woodland | Coastal scrub	Inhabits low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats.	Prefers washes and other sandy areas with patches of brush and rocks. Perennial plants necessary for its major food: termites.	No suitable habitat is present on the project site. This species is **not present.**
Aspidoscelis tigris stejnegeri	coastal whiptail	Reptiles	None	None		Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland & riparian areas.	Ground may be firm soil, sandy, or rocky.	No suitable habitat is present on the project site. This species is **not present.**
Athene cunicularia	burrowing owl	Birds	None	None	Coastal prairie | Coastal scrub | Great Basin grassland | Great Basin scrub | Mojavean desert scrub | Sonoran desert scrub | Valley & foothill grassland	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation.	Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Suitable habitat is present on site. **This species has the potential to be present.**
Bombus crotchii	Crotch bumble bee	Insects	None	Candidate Endangered		Coastal California east to the Sierra-Cascade crest and south into Mexico.	Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	No suitable habitat is present on the project site. This species is **not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Branchinecta sandiegonensis	San Diego fairy shrimp	Crustaceans	Endangered	None	Chaparral | Coastal scrub | Vernal pool | Wetland	Endemic to San Diego and Orange County mesas.	Vernal pools.	No suitable habitat is present on the project site. This species is **not present.**
Buteo swainsoni	Swainson's hawk	Birds	None	Threatened	Great Basin grassland | Riparian forest | Riparian woodland | Valley & foothill grassland	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands with groves or lines of trees.	Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	No suitable habitat is present on the project site. This species is **not present.**
Campylorhynchus brunneicapillus sandiegensis	coastal cactus wren	Birds	None	None	Coastal scrub	Southern California coastal sage scrub.	Wrens require tall opuntia cactus for nesting and roosting.	No suitable habitat is present on the project site. This species is **not present.**
Carolella busckana	Busck's gallmoth	Insects	None	None	Coastal dunes | Coastal scrub			No suitable habitat is present on the project site. This species is **not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Catostomus santaanae	Santa Ana sucker	Fish	Threatened	None	Aquatic | South coast flowing waters	Endemic to Los Angeles Basin south coastal streams.	Habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear water, and algae.	No suitable habitat is present on the project site. This species is **not present.**
Ceratochrysis longimala	Desert cuckoo wasp	Insects	None	None				No suitable habitat is present on the project site. This species is **not present.**
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	Mammals	None	None	Chaparral | Coastal scrub	Coastal scrub, chaparral, grasslands, sagebrush, etc. in western San Diego County.	Sandy, herbaceous areas, usually in association with rocks or coarse gravel.	No suitable habitat is present on the project site. This species is **not present.**
Cicindela tranquebarica viridissima	greenest tiger beetle	Insects	None	None	Riparian woodland	Inhabits the woodlands adjacent to the Santa Ana River basin.	Usually found in open spots between trees.	No suitable habitat is present on the project site. This species is **not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Birds	Threatened	Endangered	Riparian forest	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems.	Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	No suitable habitat is present on the project site. This species is **not present.**
Coleonyx variegatus abbotti	San Diego banded gecko	Reptiles	None	None	Chaparral | Coastal scrub	Coastal & cismontane Southern California.	Found in granite or rocky outcrops in coastal scrub and chaparral habitats.	No suitable habitat is present on the project site. This species is **not present.**
Coturnicops noveboracensis	yellow rail	Birds	None	None	Freshwater marsh | Meadow & seep	Summer resident in eastern Sierra Nevada in Mono County.	Freshwater marshlands.	No suitable habitat is present on the project site. This species is **not present.**
Crotalus ruber	red-diamond rattlesnake	Reptiles	None	None	Chaparral | Mojavean desert scrub | Sonoran desert scrub	Chaparral, woodland, grassland, & desert areas from coastal San Diego County to the eastern slopes of the mountains.	Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks or surface cover objects.	No suitable habitat is present on the project site. This species is **not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Diplectrona californica	California diplectronan caddisfly	Insects	None	None	Aquatic			No suitable habitat is present on the project site. This species is **not present.**
Dipodomys merriami parvus	San Bernardino kangaroo rat	Mammals	Endangered	Candidate Endangered	Coastal scrub	Alluvial scrub vegetation on sandy loam substrates characteristic of alluvial fans and flood plains.	Needs early to intermediate seral stages.	No suitable habitat is present on the project site. This species is **not present.**
Dipodomys stephensi	Stephens' kangaroo rat	Mammals	Endangered	Threatened	Coastal scrub | Valley & foothill grassland	Primarily annual & perennial grasslands, but also occurs in coastal scrub & sagebrush with sparse canopy cover.	Prefers buckwheat, chamise, brome grass and filaree. Will burrow into firm soil.	No suitable habitat is present on the project site. This species is **not present.**
Elanus leucurus	white-tailed kite	Birds	None	None	Cismontane woodland | Marsh & swamp | Riparian woodland | Valley & foothill grassland | Wetland	Rolling foothills and valley margins with scattered oaks & river bottomlands or marshes next to deciduous woodland.	Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	No suitable habitat is present on the project site. This species is **not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Empidonax traillii extimus	southwestern willow flycatcher	Birds	Endangered	Endangered	Riparian woodland	Riparian woodlands in Southern California.		No suitable habitat is present on the project site. This species is **not present.**
Emys marmorata	western pond turtle	Reptiles	None	None	Aquatic | Artificial flowing waters | Klamath/North coast flowing waters | Klamath/North coast standing waters | Marsh & swamp | Sacramento/San Joaquin flowing waters | Sacramento/San Joaquin standing waters | South coast flowing waters | South coast standing waters | Wetland	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation.	Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	No suitable habitat is present on the project site. This species is **not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Eremophila alpestris actia	California horned lark	Birds	None	None	Marine intertidal & splash zone communities | Meadow & seep	Coastal regions, chiefly from Sonoma County to San Diego County. Also main part of San Joaquin Valley and east to foothills.	Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	No suitable habitat is present on the project site. This species is **not present.**
Eumops perotis californicus	western mastiff bat	Mammals	None	None	Chaparral | Cismontane woodland | Coastal scrub | Valley & foothill grassland	Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral, etc.	Roosts in crevices in cliff faces, high buildings, trees and tunnels.	No suitable habitat is present on the project site. This species is **not present.**
Euphydryas editha quino	quino checkerspot butterfly	Insects	Endangered	None	Chaparral | Coastal scrub	Sunny openings within chaparral & coastal sage shrublands in parts of Riverside & San Diego counties.	Hills and mesas near the coast. Need high densities of food plants Plantago erecta, P. insularis, and Orthocarpus purpurescens.	No suitable habitat is present on the project site. This species is **not present.**
Gila orcuttii	arroyo chub	Fish	None	None	Aquatic | South coast flowing waters	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave & San Diego river basins.	Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	No suitable habitat is present on the project site. This species is **not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Gonidea angulata	western ridged mussel	Mollusks	None	None	Aquatic	Primarily creeks & rivers & less often lakes. Originally in most of state, now extirpated from Central & Southern Calif.		No suitable habitat is present on the project site. This species is **not present.**
Haliaeetus leucocephalus	bald eagle	Birds	Delisted	Endangered	Lower montane coniferous forest | Oldgrowth	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water.	Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.	No suitable habitat is present on the project site. This species is **not present.**
Icteria virens	yellow-breasted chat	Birds	None	None	Riparian forest | Riparian scrub | Riparian woodland	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses.	Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 ft of ground.	No suitable habitat is present on the project site. This species is **not present.**
Lasiurus xanthinus	western yellow bat	Mammals	None	None	Desert wash	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats.	Roosts in trees, particularly palms. Forages over water and among trees.	No suitable habitat is present on the project site. This species is **not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Laterallus jamaicensis coturniculus	California black rail	Birds	None	Threatened	Brackish marsh | Freshwater marsh | Marsh & swamp | Salt marsh | Wetland	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays.	Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	No suitable habitat is present on the project site. This species is **not present.**
Lepus californicus bennettii	San Diego black-tailed jackrabbit	Mammals	None	None	Coastal scrub	Intermediate canopy stages of shrub habitats & open shrub / herbaceous & tree / herbaceous edges.	Coastal sage scrub habitats in Southern California.	No suitable habitat is present on the project site. This species is **not present.**
Myotis yumanensis	Yuma myotis	Mammals	None	None	Lower montane coniferous forest | Riparian forest | Riparian woodland | Upper montane coniferous forest	Optimal habitats are open forests and woodlands with sources of water over which to feed.	Distribution is closely tied to bodies of water. Maternity colonies in caves, mines, buildings or crevices.	No suitable habitat is present on the project site. This species is **not present.**
Neolarra alba	white cuckoo bee	Insects	None	None		Known only from localities in Southern California.	Cleptoparasitic in the nests of perdita bees.	No suitable habitat is present on the project site. This species is **not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Neotoma lepida intermedia	San Diego desert woodrat	Mammals	None	None	Coastal scrub	Coastal scrub of Southern California from San Diego County to San Luis Obispo County.	Moderate to dense canopies preferred. They are particularly abundant in rock outcrops, rocky cliffs, and slopes.	No suitable habitat is present on the project site. This species is **not present.**
Nyctinomops femorosaccus	pocketed free-tailed bat	Mammals	None	None	Joshua tree woodland | Pinon & juniper woodlands | Riparian scrub | Sonoran desert scrub	Variety of arid areas in Southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, desert riparian, etc.	Rocky areas with high cliffs.	No suitable habitat is present on the project site. This species is **not present.**
Nyctinomops macrotis	big free-tailed bat	Mammals	None	None		Low-lying arid areas in Southern California.	Need high cliffs or rocky outcrops for roosting sites. Feeds principally on large moths.	No suitable habitat is present on the project site. This species is **not present.**
Oncorhynchus mykiss irideus pop. 10	steelhead - southern California DPS	Fish	Endangered	None	Aquatic | South coast flowing waters	Federal listing refers to populations from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego County).	Southern steelhead likely have greater physiological tolerances to warmer water and more variable conditions.	No suitable habitat is present on the project site. This species is **not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Pandion haliaetus	osprey	Birds	None	None	Riparian forest	Ocean shore, bays, freshwater lakes, and larger streams.	Large nests built in tree-tops within 15 miles of a good fish-producing body of water.	No suitable habitat is present on the project site. This species is **not present.**
Perognathus longimembris brevinasus	Los Angeles pocket mouse	Mammals	None	None	Coastal scrub	Lower elevation grasslands and coastal sage communities in and around the Los Angeles Basin.	Open ground with fine, sandy soils. May not dig extensive burrows, hiding under weeds and dead leaves instead.	No suitable habitat is present on the project site. This species is **not present.**
Phrynosoma blainvillii	coast horned lizard	Reptiles	None	None	Chaparral | Cismontane woodland | Coastal bluff scrub | Coastal scrub | Desert wash | Pinon & juniper woodlands | Riparian scrub | Riparian woodland | Valley & foothill grassland	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	No suitable habitat is present on the project site. This species is **not present.**
Polioptila californica californica	coastal California gnatcatcher	Birds	Threatened	None	Coastal bluff scrub | Coastal scrub	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California.	Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	No suitable habitat is present on the project site. This species is **not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Rhaphiomidas terminatus abdominalis	Delhi Sands flower-loving fly	Insects	Endangered	None	Interior dunes	Found only in areas of the Delhi Sands formation in southwestern San Bernardino & northwestern Riverside counties.	Requires fine, sandy soils, often with wholly or partly consolidated dunes & sparse vegetation. Oviposition req. shade.	No suitable habitat is present on the project site. This species is **not present.**
Rhinichthys osculus ssp. 3	Santa Ana speckled dace	Fish	None	None	Aquatic | South coast flowing waters	Headwaters of the Santa Ana and San Gabriel rivers. May be extirpated from the Los Angeles River system.	Requires permanent flowing streams with summer water temps of 17-20 C. Usually inhabits shallow cobble and gravel riffles.	No suitable habitat is present on the project site. This species is **not present.**
Salvadora hexalepis virgultea	coast patch-nosed snake	Reptiles	None	None	Coastal scrub	Brushy or shrubby vegetation in coastal Southern California.	Require small mammal burrows for refuge and overwintering sites.	No suitable habitat is present on the project site. This species is **not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Setophaga petechia	yellow warbler	Birds	None	None	Riparian forest | Riparian scrub | Riparian woodland	Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada.	Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders.	No suitable habitat is present on the project site. This species is **not present.**
Spea hammondii	western spadefoot	Amphibians	None	None	Cismontane woodland | Coastal scrub | Valley & foothill grassland | Vernal pool | Wetland	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands.	Vernal pools are essential for breeding and egg-laying.	No suitable habitat is present on the project site. This species is **not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Spinus lawrencei	Lawrence's goldfinch	Birds	None	None	Broadleaved upland forest | Chaparral | Pinon & juniper woodlands | Riparian woodland	Nests in open oak or other arid woodland and chaparral, near water. Nearby herbaceous habitats used for feeding.	Closely associated with oaks.	This species was observed foraging within the borrow area during the site survey. However, no nesting habitat is present on the proposed project site or borrow area. **This species is present.**
Taricha torosa	Coast Range newt	Amphibians	None	None		Coastal drainages from Mendocino County to San Diego County.	Lives in terrestrial habitats & will migrate over 1 km to breed in ponds, reservoirs & slow moving streams.	No suitable habitat is present on the project site. This species is **not present.**

Scientific Name	Common Name	Taxon Group	Federal List	State List	Habitats	General Habitat	Micro Habitat	Presence/ Absence
Thamnophis hammondii	two-striped gartersnake	Reptiles	None	None	Marsh & swamp | Riparian scrub | Riparian woodland | Wetland	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation.	Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	No suitable habitat is present on the project site. This species is **not present.**
Vireo bellii pusillus	least Bell's vireo	Birds	Endangered	Endangered	Riparian forest | Riparian scrub | Riparian woodland	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft.	Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	No suitable habitat is present on the project site. This species is **not present.**

APPENDIX C

West side of the project site facing east showing disturbed non-native vegetation.

West side of the project site facing south showing disturbed non-native vegetation.

West side of the project site facing east towards the I-15 Freeway showing disturbed non-native vegetation.

Hernandez Environmental Services

East side of the project site facing south/southeast showing disturbed non-native vegetation.

East side of the project site facing north showing disturbed non-native vegetation and disturbed habitat.

East side of the project site facing west showing disturbed non-native vegetation.

Hernandez Environmental Services

View of mulefat scrub habitat on site.

View of willow scrub habitat on site.

View of riparian woodland on site.

Hernandez Environmental Services

APPENDIX D

Soil Map—Western Riverside Area, California
(2024 Property Boundary)

Map Scale: 1:5,140 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 50 100 200 300

Feet
0 200 400 800 1200

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Western Riverside Area, California
Survey Area Data: Version 16, Aug 30, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 14, 2022—Mar 17, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
GoB	Grangeville loamy fine sand, drained, 0 to 5 percent slopes	9.0	63.0%
GvB	Grangeville fine sandy loam, saline-alkali, 0 to 5 percent slopes	4.6	32.2%
MmD2	Monserate sandy loam, 8 to 15 percent slopes, eroded	0.3	2.0%
PlB	Placentia fine sandy loam, 0 to 5 percent slopes	0.4	2.8%
Totals for Area of Interest		**14.4**	**100.0%**

APPENDIX E

I-15/Jurupa Valley Storage

Noise Impact Study

City of Jurupa Valley, CA

Prepared for:

MHS 98, LLC
Steve Galvez
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Prepared by:

MD Acoustics, LLC
Robert Pearson
1197 Los Angeles Avenue, Ste 256
Simi Valley, CA 93065

Date: 4/26/2023

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1.0 Introduction

1.1 Purpose of Analysis and Study Objectives

This noise assessment was prepared to evaluate the potential noise impacts for the project study area and to recommend noise mitigation measures, if necessary, to minimize the potential noise impacts. The assessment was conducted and compared to the noise standards set forth by the Federal, State, and Local agencies. Consistent with the City's Noise Guidelines, the project must demonstrate compliance to the applicable noise criterion as outlined within the City's Noise Element and Municipal Code.

The following is provided in this report:

- A description of the study area and the proposed project
- Information regarding the fundamentals of noise
- A description of the local noise guidelines and standards
- An evaluation of the existing ambient noise environment
- An analysis of stationary noise impacts from the project site to adjacent land uses
- Construction noise and vibration evaluation

1.2 Site Location and Study Area

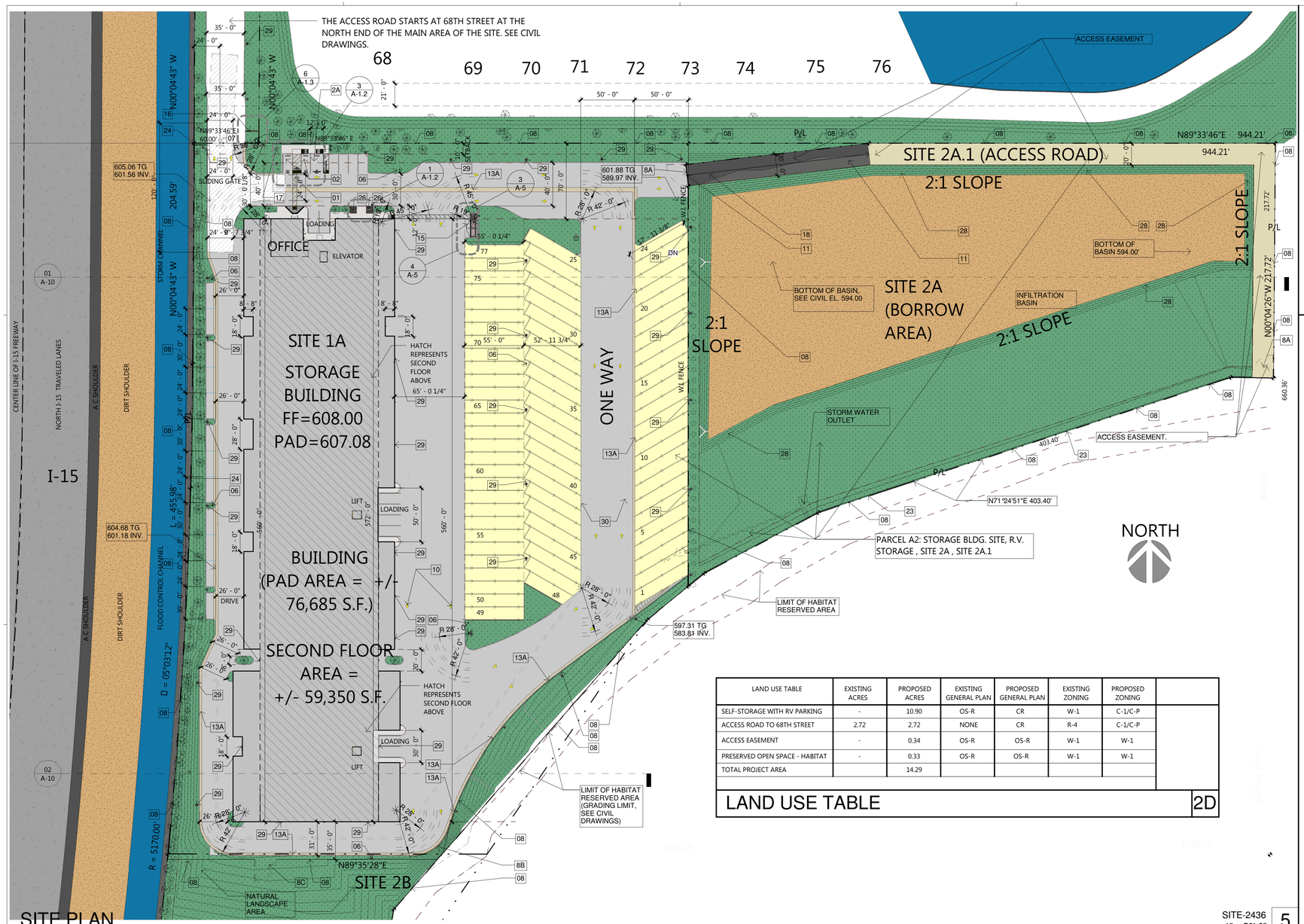
The project site is located at APN's 152-020-010, 152-060-007, 152-060-009, and 152-060-006, situated along the I-15 freeway in the City of Jurupa Valley, California, as shown in Exhibit A. The project is currently zoned W-1 Watercourse, Watershed, and Conservation Areas with proposed zoning of C-1/C-P General Commercial and W-1 Watercourse, Watershed and Conservation Areas. Land uses surrounding the site include residential to the north, and open space to the east and south, with residential to the west across the I-15 freeway.

1.3 Proposed Project Description

The Project proposes to develop a two-story storage facility of which 670 square feet will be office space, 76,015 square feet for the first floor and 59,350 sf will be the second floor. The project will include a total of 21 parking and RV storage spaces. Exhibit B demonstrates the site plan for the project.

Exhibit A

Location Map



SITE PLAN

SITE-2436
1" = 50'-0"

5

LAND USE TABLE	EXISTING ACRES	PROPOSED ACRES	EXISTING GENERAL PLAN	PROPOSED GENERAL PLAN	EXISTING ZONING	PROPOSED ZONING	
SELF-STORAGE WITH RV PARKING	-	10.90	OS-R	CR	W-1	C-1/C-P	
ACCESS ROAD TO 68TH STREET	2.72	2.72	NONE	CR	R-4	C-1/C-P	
ACCESS EASEMENT	-	0.34	OS-R	OS-R	W-1	W-1	
PRESERVED OPEN SPACE - HABITAT	-	0.33	OS-R	OS-R	W-1	W-1	
TOTAL PROJECT AREA		14.29					

LAND USE TABLE 2D

UTILITIES

SEWER & WATER:
JURUPA COMMUNITY SERVICES DISTRICT
11201 HARREL STREET
MIRA LOMA, CA 91752

GAS:
SOUTHERN CALIFORNIA GAS COMPANY
CENTRALIZED CORRESPONDENCE
P.O. BOX 3150
SAN DIMAS, CA 91773
(800) 427-2000

TELEPHONE:
VERIZON
CUSTOMER SALES & SOLUTIONS CENTER
P.O. BOX 11328
ST. PETERSBURG, FL 33733
(800) 655-4555

ELECTRICAL:
SOUTHERN CALIFORNIA EDISON COMPANY
1351 E. FRANCIS STREET
ONTARIO, CA 91761
(800) 655-4555

CABLE:
VERIZON
CUSTOMER SALES & SOLUTIONS CENTER
P.O. BOX 11328
ST. PETERSBURG, FL 33733
(800) 483-4000

SCHOOL DISTRICT:
JURUPA UNIFIED SCHOOL DISTRICT
4850 PEDLEY ROAD
JURUPA VALLEY, CA 92509
(951) 360-4160

FIRE PROTECTION:
CAL FIRE WEST, RIVERSIDE STATION 18
7545 MISSION BLVD.
JURUPA VALLEY, CA 92509
(951) 685-5260

FENCING:
ENTIRE PROJECT IS FENCED WITH 6 FT CHAINLINK FENCING AND WROUGHT IRON FENCING. AUTOMATIC GATES WILL BE INSTALLED AT DRIVEWAYS INTO SITE.

HAZARD MATERIALS:
NO FLAMMABLE/COMBUSTIBLE LIQUIDS OR WASTE OIL WILL BE STORED ON SITE

FIRE DEPARTMENT NOTES:
PRIOR TO ISSUANCE OF A BUILDING PERMIT THE FOLLOWING SHALL PROVIDED:

FIRE HYDRANTS AND FIRE FLOW:
PROVIDE OR SHOW THERE EXIST FIRE HYDRANT(S) CAPABLE OF DELIVERING FIRE FLOW AS REQUIRED BY CALIFORNIA FIRE CODE AND RIVERSIDE COUNTY FIRE DEPARTMENT STANDARDS WITHIN 400 FEET OF ALL PORTIONS OF ALL STRUCTURES

UTILITIES 2

J. Craig Mann
ARCHITECT
ARCHITECTURE . PLANNING . INTERIOR

1901 NEWPORT BLVD.
SUITE 350
COSTA MESA, CA 92626
JCRAIGM@GMAIL.COM
STUDIOM.JCMA@GMAIL.COM

CLIENT
STEVE GALVEZ

MR. STEVE GALVEZ
20 PASEO VERDE
SAN CLEMENTE, CA 92673
(951) 297-8120
EMAIL: STEVE@STEVEGALVEZ.COM

PROJECT TITLE
R.V. SELF-STORAGE FACILITY

68TH STREET 01-15
JURUPA VALLEY, CA

JURUPA VALLEY, CALIFORNIA

SHEET TITLE
SITE PLAN

SIGN BY

LICENSED ARCHITECT
J. CRAIG MANN
C-11230
Exp. 01-31-25
STATE OF CALIFORNIA

DELTA	REVISION	DATE
	ISSUED	06/14/23
	REVISED LIFT AND PLANS	07/27/23
	FIRE TRUCK 'T' TURNING	08/01/23
	UNIT MIXES- SITE	08/15/23
	SITE AND SECTIONS	09/07/23
	REVISION - CORRECTIONS	09/28/23
	REVISION - CIVIL	03/27/24
	REVISION	04/17/24
	EXHIBIT-PROJECT AREA	07/16/24

DATE: 02/18/23
JOB NUMBER 20-848

A-1

CIVIL ENGINEERING (TBD)
W.H. CIVIL
25 MAUCHLY, SUITE 323
IRVINE, CA 92618
1590 OAKLAND ROAD, SUITE B112.
SAN JOSE, CA 95131

ACOUSTICAL ENGINEERING
MD ACOUSTICS (GHG, AQ ENERGY & NOISE)
MIKE DICKERSON
1197 LOS ANGELES AVE, SUITE C-256
SIMI VALLEY, CA 93065
(P) 805-426-4477
MIKE@MDACOUNSTICS.COM

TRAFFIC ENGINEERING
TJW ENGINEERS
THOMAS WHEAT
6 VENTURE, SUITE 265 IRVINE, CA 92618
(P) 949-878-3509
THOMAS@TJWENGINEERING.COM

CULTURAL RESOURCE
CULTURAL RESOURCES CONSULTANT
JEAN A. KELLER, Ph. D.
1042 N. EL CAMINO REAL, SUITE B-244
ENCINITAS, CALIFORNIA 92024
(760) 815-1691
4JAKELLER@GMAIL.COM

HERNANDEZ ENVIRONMENTAL
(GENERAL BIO, JPR & CEQA)
JUAN & SHAWN HERNANDEZ
17037 LAKESHORE DRIVE
LAKE ELSINORE, CA 92530
909-579-1657
JUAN@HERNANDEZENVIRONMENTAL.COM
SHAWN@HERNANDEZENVIRONMENTAL.COM

GEO TECHNICAL REPORT
LGC GEO-ENVIRONMENTAL, INC.
GEOTECHNICAL
ENVIRONMENTAL
METARIALS TESTING
JONATHAN LEVARIO
27570 COMMERCE CENTER DRIVE,
SUITE 128
TEMECULA, CALIFORNIA 92590
PHONE: (951) 297 2450
FAX: (951) 719 2998
WWW.LGCGEOENV.COM
JONATHAN@LGCGEOENV.COM

LANDSCAPE ARCHITECT
ROYAL OAK DESIGNS
SYLVIA LYON
10252 GOLDEN YARROW LANE
ALTA LOMA, CA 91701
909-244-9667
ROYALOAKDESIGN@VERIZON.NET

CONSULTANTS 5

1. SELF-STORAGE WITH R.V. PARKING SITE ONLY: 4'-0" W. MIN. ACCESSIBLE PATH OF TRAVEL. 5% MAX. SLOPE IN TRAVEL DIRECTION AND 2% MAX. CROSS SLOPE.
2. 9'-0" x 18'-0" ACCESSIBLE PARKING WITH 8'-0" WIDE LOADING. 2A. 12'-0" x 18'-0" ACCESSIBLE EV CHARGING ONLY WITH 5'-0" WIDE LOADING
3. (2) 12'-0" W. x 6'-0" W.I. SWINGING GATE WITH MOTOR WITH KNOX BOX FOR FIRE DEPARTMENT 4. LANDSCAPING
5. KEY KNOX BOX MOUNTED AT ROLLING GATE. PROVIDE KEY TO THE GATE AND THE BUILDING ENTRANCE.
6. FIRE HYDRANT LOCATION
7. 24'-0" W. x 6'-0" H. POWER OPERATED SLIDING GATE WITH KNOX BOX PER FIRE DEPARTMENT.
8. 6' H. W.I. FENCE 8A. 20'-0" x 6'-0" W.I. SWINGING GATE WITH KNOX BOX
   8B. 4'-0" H. RETAINING WALL, SEE CIVIL
   8C. 16'-0" x 6'-0" W.I. SWINGING GATE WITH KNOX BOX
9. ENTRY SIGN 10. PAINTED DIRECTIONAL ARROW ON PAVING.
11. 20'-0" ACCESS ROAD. RAMP SLOPE TO BE 4 % 12. LOW AND HIGH KEYPAD.
13. ACCESSIBLE SIGN AT ENTRY DRIVE. 13A. CONCRETE GUTTER, SEE CIVIL DRAWINGS
14. 25'-0" SETBACK LINE AT PROPERTY FACING STREET.
15. TRASH ENCLOSURE
16. MONUMENT SIGN. MONUMENT SIGN AND ANY OTHER SIGNAGE OR FREE STANDING SIGN TO BE SUBMITTED UNDER SEPARATE PERMIT.
17. FLAG POLE. 35'-0" H. MAX.
18. 20'-0" WIDE DRIVE RAMP WITH 10 PERCENT SLOPE (170'-0" MIN. LONG FOR 17'-0" H.)
19. 4 HR. SEPARATION WALL, 2'-6" MIN. EXTENDS ABOVE ADJACENT ROOF.
20. METAL STANDING SEAM ROOF. 21. DUMP STATION.
22. PROPOSED DETENTION BASIN. DEEP, SEE CIVIL DRAWING.
23. 6'-0" H. CONCRETE BLOCK RETAINING WALL. SEE CIVIL DRAWINGS
24. FENCE AT PROPERTY LINE. SEE CIVIL
25. 3 HR. RATED WALL WITH PARAPET EXTENDS 2'-6" MIN. OVER ROOF TO PROVIDE BUILDING SEPARATION AREAS UNDER 47,100 S.F. PER FIRE DEPARTMENT REQUIREMENT.
26. SITE BICYCLE RACK OR BICYCLE SPACES
27. 17'-0" TO 20'-0" H. 2:1 SLOPE. SEE CIVIL DRAWINGS. 28. 2:1 SLOPE
29. SITE LIGHTING. SEE PHOTOMETRIC PLAN. 30. DRAINAGE SYSTEM, SEE CIVIL

SITE PLAN KEY NOTES 4

SCOPE OF WORK: NEW SELF-STORAGE FACILITY. THE TOTAL SITE CONSISTS OF 14.29 ACRES AS FOLLOWS:
APN 152-020-010 & APN 152-060-009.....2.72 ACRES (ACCESS ROAD FROM 68 STREET)
APN 152-060-007
SITE AREA : +/-474,804 S.F., 10.90 ACRES (SELF-STORAGE WITH R.V. PARKING, & A PART OF EASEMENT).
SELF-STORAGE & R.V. STORAGE SITE :
SITE AREA 1A = +/- 329,749 SF (7.57 ACRES) (BUILDING & R,V. SITE AND MISC.)
SITE 2A (BORROWED AREA) = 144,982 SF(3.33 ACRES),
SITE 2A.1 ACCESS EASEMENT = 14,873 (0.34 ACRE.)
SITE 2B = 14,375 SF(0.33 ACRES)(NATURAL LANDSCAPE)
(E) ZONING : W-1. PROPOSED ZONING: C-1/C-P AND W-1
USE GOUP-OCCUPANCY : B - OFFICE, S1- STORAGE
FLOOD ZONE: AE ZONE AND FLOODWAY. CONSTRUCTION TYPE: II-A; SPRINKLER: YES, SPRINKLERED
STORY: TWO STORIES FOR STORAGE, ONE STORY FOR OFFICE, STREET SETBACK = 25'-0"
BUILDING COVERAGE = 76,685 S.F. (23.26 %) (TOTAL BUILT-OUT BASED ON SITE AREA 1A)
LANDSCAPE AREA = 25,688 S.F. (7.79 %) (ESTIMATED)
PAVEMENT AREA & SOIL (MISC.) = 227,376 S.F. (68.95 %)
(BASED ON SITE AREA 1A = 329,749 SF = 7.57 ACRES)
FLOOR AREAS:
OFFICE.....670 S.F.
STORAGE FIRST FLOOR.....76,015 S.F. (UNLIMITED S.F. PER CBC TABLE 506.2 OR 507.4)
SECOND FLOOR.....59,350 S.F. (UNLIMITED S.F. PER CBC TABLE 506.2 OR 507.4)
TOTAL.....136,035 S.F. (EST.)
STORAGE AREA.....135,365 S.F.
(TYPE II- A, SPRINKLERED BUILDING WITH 2 STORIES PER CBC TABLE 506.2,
EXTERIOR AND INTERIOR BEARING WALLS TO BE 1 HR RATED PER CBC TABLE 601,
FLOOR AND ASSOCIATED SECONDARY MEMBERS TO BE 1 HR RATED PER CBC TABLE 601)

TOTAL PARKING REQUIRED: 4+6+11 =.21 SPACES INCLUDING 2 ADA ACCESS. SPACES
PROVIDED: (6) 9'X18' SPACES INCLUDING 2 ADA ACCESSIBLE PARKING, (1) 12'-0" x 18'-0" ACCESSIBLE EV CHARGING ONLY AND (12) 9'X24' PARALLEL PARKING AND (8) LOADING SPACES
= (19) PARKING SPACES AND (8) LOADING SPACES
R.V. STORAGE SITE: R.V. PARKING SPACES: +/- 77 SPACES (12' x 50' & 12' x 55')

PROJECT DATA 3

LEGAL DESCRIPTION:
APN: 152-020-010 (1.83 AC.); 152-060-007 (15.13 AC.); 152-060-009 (0.91 AC.) AND A PORTION OF 006
TOWNSHIP 2 SOUTH, RANGE 6 WEST, SECTIONS 30 & 31, SBM
USGS CORONA NORTH, CALIFORNIA QUADRANGLE, 7.5; SERIES

LEGAL DESCRIPTIONS 2A

STEVE GALVEZ
20 PASEO VERDE
SAN CLEMENTE, CA 92673
Mr. CONTACT PERSON
STEVE GALVEZ
951-297-8120
EMAIL:
STEVE@STEVEGALVEZ.COM

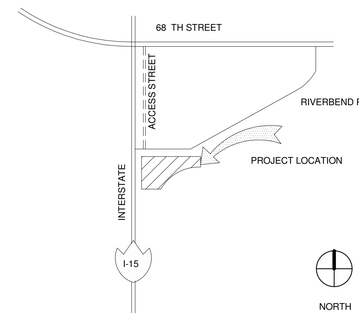
OWNERS

INDEX

2B

USE	PROPOSED SIZE	CODE REQUIREMENT	REQUIRED SPACE
OFFICE (670 S.F.)	670 S.F.	1 SPACE PER EVERY 200 SQUARE FEET OF NET LEASEABLE FLOOR AREA	3.35 OR 4
STORAGE (135,365 S.F.)	8 EMPLOYEES	2 SPACES PER 3 EMPLOYEES	5.3 OR 6
STORAGE YARD (53,539 S.F.)	(53,539 S.F.)	1 SPACE PER EACH 5,000 SQUARE FEET OF LOT AREA	10.7 OR 11
STORAGE YARD(R.V. AREA 1 + R.V. AREA 2 = 53,539 S.F.)		TOTAL	21

TABLE PARKING REQUIREMENT 2C



VICINITY MAP N.T.S. 1

2.0 Fundamentals of Noise

This section of the report provides basic information about noise and presents some of the terms used in the report.

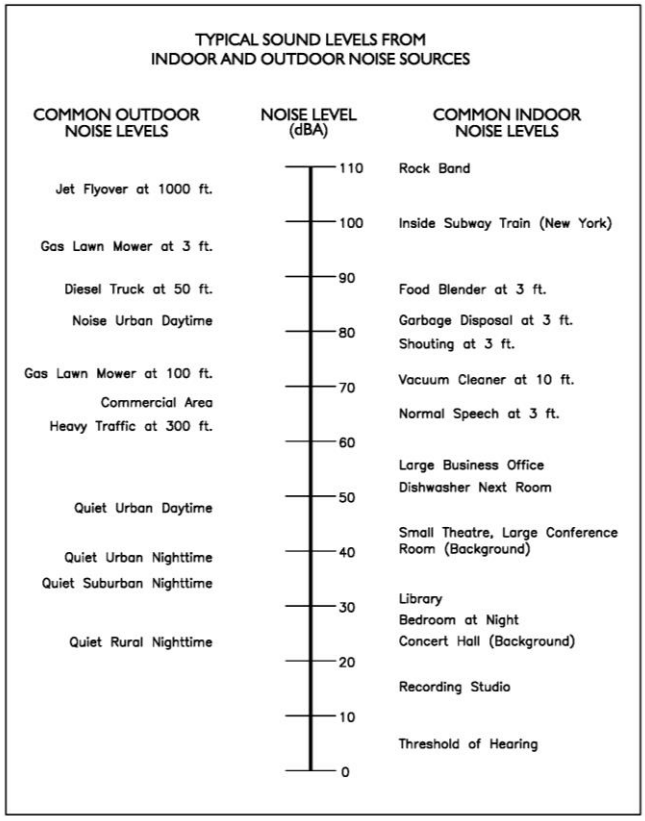
2.1 Sound, Noise and Acoustics

Sound is a disturbance created by a moving or vibrating source and is capable of being detected by the hearing organs. Sound may be thought of as mechanical energy of a moving object transmitted by pressure waves through a medium to a human ear. For traffic or stationary noise, the medium of concern is air. *Noise* is defined as sound that is loud, unpleasant, unexpected, or unwanted.

2.2 Frequency and Hertz

A continuous sound is described by its *frequency* (pitch) and its *amplitude* (loudness). Frequency relates to the number of pressure oscillations per second. Low-frequency sounds are low in pitch (bass sounding) and high-frequency sounds are high in pitch (squeak). These oscillations per second (cycles) are commonly referred to as Hertz (Hz). The human ear can hear from the bass pitch starting out at 20 Hz all the way to the high pitch of 20,000 Hz.

Exhibit C: Typical A-Weighted Noise Levels



2.3 Sound Pressure Levels and Decibels

The *amplitude* of a sound determines its loudness. The loudness of sound increases or decreases as the amplitude increases or decreases. Sound pressure amplitude is measured in units of micro-Newton per square inch meter ($\mu N/m^2$), also called micro-Pascal (µPa). One µPa is approximately one hundred billionths (0.00000000001) of normal atmospheric pressure. Sound pressure level (SPL or L_p) is used to describe in logarithmic units the ratio of actual sound pressures to a reference pressure squared. These units are called decibels, abbreviated dB. Exhibit C illustrates references sound levels for different noise sources.

2.4 Addition of Decibels

Because decibels are on a logarithmic scale, sound pressure levels cannot be added or subtracted by simple plus or minus addition. When two sounds or equal SPL are combined, they will produce an SPL 3 dB greater than the original single SPL. In other words, sound energy must be doubled to produce a 3 dB increase. If two sounds differ by approximately 10 dB, the higher sound level is the predominant sound.

2.5 Human Response to Changes in Noise Levels

In general, the healthy human ear is most sensitive to sounds between 1,000 Hz and 5,000 Hz, and it perceives a sound within that range as being more intense than a sound with a higher or lower frequency with the same magnitude. For purposes of this report as well as with most environmental documents, the A-scale weighting is typically reported in terms of A-weighted decibel (dBA), a scale designed to account for the frequency-dependent sensitivity of the ear. Typically, the human ear can barely perceive a change in noise level of 3 dB. A change in 5 dB is readily perceptible, and a change in 10 dB is perceived as being twice or half as loud. As previously discussed, a doubling of sound energy results in a 3 dB increase in sound, which means that a doubling of sound energy (e.g. doubling the volume of traffic on a highway) would result in a barely perceptible change in sound level.

2.6 Noise Descriptors

Noise in our daily environment fluctuates over time. Some noise levels occur in regular patterns, others are random. Some noise levels are constant while others are sporadic. Noise descriptors were created to describe the different time-varying noise levels.

A-Weighted Sound Level: The sound pressure level in decibels as measured on a sound level meter using the A-weighted filter network. The A-weighting filter de-emphasizes the very low and very high-frequency components of the sound in a manner similar to the response of the human ear. A numerical method of rating human judgment of loudness.

Ambient Noise Level: The composite of noise from all sources, near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

Community Noise Equivalent Level (CNEL): The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five (5) decibels to sound levels in the evening from 7:00 to 10:00 PM and after addition of ten (10) decibels to sound levels in the night before 7:00 AM and after 10:00 PM.

Decibel (dB): A unit for measuring the amplitude of a sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micro-pascals.

dB(A): A-weighted sound level (see definition above).

Equivalent Sound Level (LEQ): The sound level corresponding to a steady noise level over a given sample period with the same amount of acoustic energy as the actual time-varying noise level. The energy average noise level during the sample period.

Habitable Room: Any room meeting the requirements of the Uniform Building Code, or other applicable regulations, which is intended to be used for sleeping, living, cooking or dining purposes, excluding such enclosed spaces as closets, pantries, bath or toilet rooms, service rooms, connecting corridors, laundries, unfinished attics, foyers, storage spaces, cellars, utility rooms and similar spaces.

L(n): The A-weighted sound level exceeded during a certain percentage of the sample time. For example, L10 in the sound level exceeded 10 percent of the sample time. Similarly L50, L90, and L99, etc.

Noise: *A*ny unwanted sound or sound which is undesirable because it interferes with speech and hearing, or is intense enough to damage hearing, or is otherwise annoying. The State Noise Control Act defines noise as "...excessive undesirable sound...".

Outdoor Living Area: Outdoor spaces that are associated with residential land uses typically used for passive recreational activities or other noise-sensitive uses. Such spaces include patio areas, barbecue areas, jacuzzi areas, etc. associated with residential uses; outdoor patient recovery or resting areas associated with hospitals, convalescent hospitals, or rest homes; outdoor areas associated with places of worship which have a significant role in services or other noise-sensitive activities; and outdoor school facilities routinely used for educational purposes which may be adversely impacted by noise. Outdoor areas usually not included in this definition are: front yard areas, driveways, greenbelts, maintenance areas and storage areas associated with residential land uses; exterior areas at hospitals that are not used for patient activities; outdoor areas associated with places of worship and principally used for short-term social gatherings; and, outdoor areas associated with school facilities that are not typically associated with educational uses prone to adverse noise impacts (for example, school play yard areas).

Percent Noise Levels: See L(n).

Sound Level (Noise Level): The weighted sound pressure level obtained by use of a sound level meter having a standard frequency filter for attenuating part of the sound spectrum.

Sound Level Meter: An instrument, including a microphone, an amplifier, an output meter, and frequency weighting networks for the measurement and determination of noise and sound levels.

Single Event Noise Exposure Level (SENEL): The dB(A) level which, if it lasted for one second, would produce the same A-weighted sound energy as the actual event.

2.7 Traffic Noise Prediction

Noise levels associated with traffic depends on a variety of factors: (1) volume of traffic, (2) speed of traffic, (3) auto, medium truck (2–3 axle) and heavy truck percentage (4 axle and greater), and sound propagation. The greater the volume of traffic, higher speeds and truck percentages equate to a louder volume in noise. A doubling of the Average Daily Traffic (ADT) along a roadway will increase noise levels by approximately 3 dB; reasons for this are discussed in the sections above.

2.8 Sound Propagation

As sound propagates from a source it spreads geometrically. Sound from a small, localized source (i.e., a point source) radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level attenuates at a rate of 6 dB per doubling of distance. The movement of vehicles down a roadway makes the source of the sound appear to propagate from a line (i.e., line source) rather than a point source. This line source results in the noise propagating from a roadway in a cylindrical spreading versus a spherical spreading that results from a point source. The sound level attenuates for a line source at a rate of 3 dB per doubling of distance.

As noise propagates from the source, it is affected by the ground and atmosphere. Noise models use hard site (reflective surfaces) and soft site (absorptive surfaces) to help calculate predicted noise levels. Hard site conditions assume no excessive ground absorption between the noise source and the

receiver. Soft site conditions such as grass, soft dirt or landscaping attenuate noise at a rate of 1.5 dB per doubling of distance. When added to the geometric spreading, the excess ground attenuation results in an overall noise attenuation of 4.5 dB per doubling of distance for a line source and 7.5 dB per doubling of distance for a point source.

Research has demonstrated that atmospheric conditions can have a significant effect on noise levels when noise receivers are located 200 feet from a noise source. Wind, temperature, air humidity, and turbulence can further impact have far sound can travel.

3.0 Ground-Borne Vibration Fundamentals

3.1 Vibration Descriptors

Ground-borne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. The effects of ground-borne vibrations typically only cause a nuisance to people, but at extreme vibration levels, damage to buildings may occur. Although ground-borne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. Ground-borne noise is an effect of ground-borne vibration and only exists indoors since it is produced from noise radiated from the motion of the walls and floors of a room and may also consist of the rattling of windows or dishes on shelves.

Several different methods are used to quantify vibration amplitude.

PPV – Known as the peak particle velocity (PPV) which is the maximum instantaneous peak in vibration velocity, typically given in inches per second.

RMS – Known as root mean squared (RMS) can be used to denote vibration amplitude

VdB – A commonly used abbreviation to describe the vibration level (VdB) for a vibration source.

3.2 Vibration Perception

Typically, developed areas are continuously affected by vibration velocities of 50 VdB or lower. These continuous vibrations are not noticeable to humans whose threshold of perception is around 65 VdB. Outdoor sources that may produce perceptible vibrations are usually caused by construction equipment, steel-wheeled trains, and traffic on rough roads, while smooth roads rarely produce perceptible ground-borne noise or vibration. To counter the effects of ground-borne vibration, the Federal Transit Administration (FTA) has published guidance relative to vibration impacts. According to the FTA, fragile buildings can be exposed to ground-borne vibration levels of 0.3 inches per second without experiencing structural damage.

3.3 Vibration Propagation

There are three main types of vibration propagation: surface, compression, and shear waves. Surface waves, or Rayleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wavefront, similar to ripples produced by throwing a rock into a pool of water. P-waves, or compression waves, are body waves that carry their energy along an expanding spherical wavefront. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. S-waves, or shear waves, are also body waves that carry energy along an expanding spherical wavefront. However, unlike P-waves, the particle motion is transverse, or side-to-side and perpendicular to the direction of propagation.

As vibration waves propagate from a source, the vibration energy decreases in a logarithmic nature and the vibration levels typically decrease by 6 VdB per doubling of the distance from the vibration source. As stated above, this drop-off rate can vary greatly depending on the soil but has been shown to be effective enough for screening purposes, in order to identify potential vibration impacts that may need to be studied through actual field tests.

4.0 Regulatory Setting

The proposed project is located in the City of Jurupa Valley, California and noise regulations are addressed through the efforts of various federal, state and local government agencies. The agencies responsible for regulating noise are discussed below.

4.1 Federal Regulations

The adverse impact of noise was officially recognized by the federal government in the Noise Control Act of 1972, which serves three purposes:

- Publicize noise emission standards for interstate commerce
- Assist state and local abatement efforts
- Promote noise education and research

The Federal Office of Noise Abatement and Control (ONAC) originally was tasked with implementing the Noise Control Act. However, it was eventually eliminated leaving other federal agencies and committees to develop noise policies and programs. Some examples of these agencies are as follows: The Department of Transportation (DOT) assumed a significant role in noise control through its various agencies. The Federal Aviation Agency (FAA) is responsible for regulating noise from aircraft and airports. The Federal Highway Administration (FHWA) is responsible for regulating noise from the interstate highway system. The Occupational Safety and Health Administration (OSHA) is responsible for the prohibition of excessive noise exposure to workers. The Housing and Urban Development (HUD) is responsible for establishing noise regulations as it relates to exterior/interior noise levels for new HUD-assisted housing developments near high noise areas.

The federal government advocates that local jurisdictions use their land use regulatory authority to arrange new development in such a way that “noise sensitive” uses are either prohibited from being constructed adjacent to a highway or, or alternatively that the developments are planned and constructed in such a manner that potential noise impacts are minimized.

Since the federal government has preempted the setting of standards for noise levels that can be emitted by the transportation source, the City is restricted to regulating the noise generated by the transportation system through nuisance abatement ordinances and land use planning.

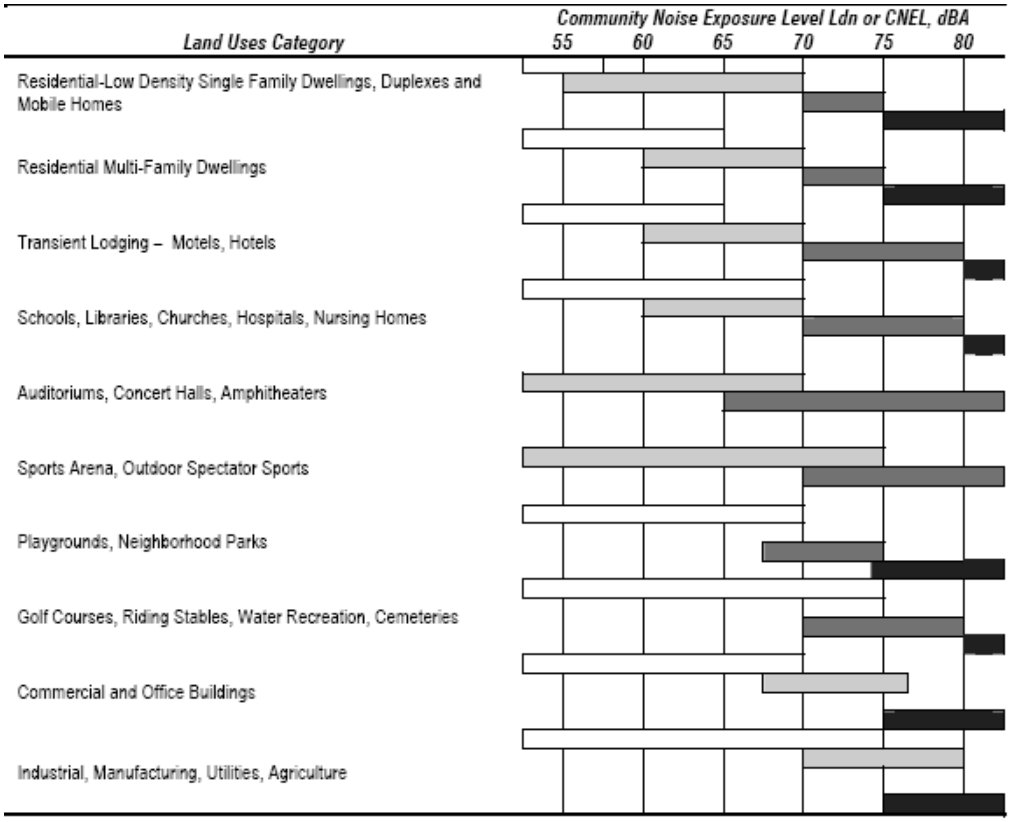
4.2 State Regulations

Established in 1973, the California Department of Health Services Office of Noise Control (ONC) was instrumental in developing regularity tools to control and abate noise for use by local agencies. One significant model is the “Land Use Compatibility for Community Noise Environments Matrix.” The matrix allows the local jurisdiction to clearly delineate compatibility of sensitive uses with various incremental levels of noise.

The State of California has established noise insulation standards as outlined in Title 24 and the Uniform Building Code (UBC) which in some cases requires acoustical analyses to outline exterior noise levels and to ensure interior noise levels do not exceed the interior threshold. The State mandates that the legislative body of each county and city adopt a noise element as part of its comprehensive general

plan. The local noise element must recognize the land use compatibility guidelines published by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable as illustrated in Exhibit D.

Exhibit D: Land Use Compatibility Guidelines



4.3 City of Jurupa Valley Noise Regulations

The City of Jurupa Valley outlines their noise regulations and standards within the Municipal Code and the Noise Element of the City of Jurupa Valley General Plan.

City of Jurupa Valley – Noise Ordinance

Chapter 11.05 from the City's municipal code outlines the noise ordinance. MD's provided excerpts of the ordinance that relates to this project.

Sec. 11.05.020. - Exemptions.

Sound emanating from the following sources is exempt from the provisions of this chapter:

(1) Facilities owned and operated by or for a governmental agency.
(2) Capital Improvement projects of a government agency.
(3) The maintenance or repair of public properties.
(4) Public safety personnel in the course of executing their official duties, including, but not limited to, sworn peace officers, emergency personnel and public utility personnel. This exemption includes, without limitation, sound emanating from all equipment used by such personnel, whether stationary or mobile.
(5) Public or private schools and school-sponsored activities.
(6) Agricultural operations on land designed "agriculture" in the Jurupa Valley General Plan, or land zoned A-1 (light agriculture), or A-D (agriculture-dairy), provided such operations are carried out in a manner consistent with accepted industry standards. This exemption includes, without limitation, sound emanating from all equipment used during such operations, whether stationary or mobile.
(7) Wind energy conversion systems (WECS), provided such systems comply with the WECS noise provisions of Jurupa Valley Municipal Code or Title 9.
(8) Private construction projects located one-quarter (¼) of a mile or more from an inhabited dwelling;
(9) Private construction projects located within one-quarter (¼) of a mile from an inhabited dwelling, provided that:
(a) Construction does not occur between the hours of six (6:00) p.m. and six (6:00) a.m. during the months of June through September; and
(b) Construction does not occur between the hours of six (6:00) p.m. and seven (7:00) a.m. during the months of October through May;
(11) Motor vehicles, other than off-highway vehicles. This exemption does not include sound emanating from motor vehicle sound systems;
(12) Heating and air conditioning equipment;
(13) Safety, warning and alarm devices, including, but not limited to, house and car alarms, and other warning devices that are designed to protect the public health, safety, and welfare; or
(14) The discharge of firearms consistent with all state laws

Section 11.05.040 – General Sound Level Standards

No person shall create any sound, or allow the creation of any sound, on any property that causes the exterior sound level on any other occupied property to exceed the sound level standards set forth in Table 1 of this section or that violates the special sound source standards set forth in Section 11.05.060.

Table 1: Allowable Exterior Noise Level

Sound Level Standards (dBA Leq)		
General Plan Land Use Designation	**Maximum Decibel Level**	
	7 a.m. - 10 p.m.	**10 p.m. - 7 a.m.**
Light density residential (LDR)	55	45
Medium density residential (MDR)		
High density residential (HDR)		
Retail commercial (CR)	65	55
Light Industrial	75	55
Business Park (BP)	65	45

(Ord. No. 2012-01, § 1(11.10.040), 2-16-2012)

Sec. 11.05.060. - Special sound sources standards.
The general sound level standards set forth in Section 11.05.040 apply to sound emanating from all sources, including the following special sound sources, and the person creating, or allowing the creation of, the sound is subject to the requirements of that section. The following special sound sources are also subject to the following additional standards, the failure to comply with which constitute separate violations of this chapter:

(2) Power tools and equipment. No person shall operate any power tools or equipment between the hours of ten (10:00) p.m. and eight (8:00) a.m. such that the power tools or equipment are audible to the human ear inside an inhabited dwelling other than a dwelling in which the power tools or equipment may be located. No person shall operate any power tools or equipment at any other time such that the power tools or equipment are audible to the human ear at a distance greater than one hundred (100) feet from the power tools or equipment. Sound level measurements may be used but are not required to establish a violation of this subsection.

Sec. 11.05.070. - Exceptions.
Exceptions may be requested from the standards set forth in Section 11.05.040 or 11.05.060 and may be characterized as construction-related or continuous events exceptions.

(1) Application and processing.

(a) Construction-related exceptions. An application for a construction-related exception shall be made to and considered by the Building Official of the city on forms provided by the Building and Safety Division and shall be accompanied by the appropriate filing fee. No public hearing is required.

(b) Continuous events exceptions. An application for a continuous events exception shall be made to the Planning Director on forms provided by the Planning Department and shall be accompanied by the appropriate filing fee. Upon receipt of an application for a continuous events exception, the Planning Director shall set the matter for public hearing before the Planning Commission, notice of which shall be given as provided in Section 9.240.250 of this Code. Notwithstanding the above, an application for a continuous events exception that is associated with an application for a land use permit shall be processed concurrently with the land use permit in the same manner that the land use permit is required to be processed.

(2) Requirements for approval. The appropriate decision-making body or officer shall not approve an exception application unless the applicant demonstrates that the activities described in the application would not be detrimental to the health, safety or general welfare of the community. In determining whether activities are detrimental to the health, safety or general welfare of the community, the appropriate decision-making body or officer shall consider such factors as the proposed duration of the activities and their location in relation to sensitive receptors. If an exception application is approved, reasonable conditions may be imposed to minimize the public detriment, including, but not limited to, restrictions on sound level, sound duration and operating hours.

(3) Appeals. The Building Official's decision on an application for a construction-related exception is considered final. After making a decision on an application for a continuous events exception, the appropriate decision-making body or officer shall mail notice of the decision to the applicant. Within ten (10) calendar days after the mailing of such notice, the applicant or an interested person may appeal the decision to the City Council pursuant to the provisions of Section 2.05.060.

City of Jurupa Valley – Noise Element

Goals, Policies, and Implementation Measures

Policies, goals and implementation program measures from the Noise Element that would mitigate potential impacts on noise include the following.

NE 3.1 Noise Analysis. Require that a noise analysis be conducted by an acoustical specialist for all proposed development projects that have the potential to generate significant noise near a noise-sensitive land use, or on or near land designated for noise-sensitive land uses, and ensure that recommended mitigation measures are implemented.

NE 3.3 Noise Buffers. Require major stationary noise generating sources to install noise buffering or reduction mechanisms within their facilities to reduce noise generation levels to the lowest level practical as a condition of the approval or renewal of project entitlements.

NE 3.4 Construction Equipment. Require that all construction equipment utilize noise reduction features (i.e., mufflers and engine shrouds) that are at least as effective as those originally installed by the equipment's manufacturer.

NE 3.5 Construction Noise. Limit commercial construction activities adjacent to or within 200 feet of residential uses to weekdays, between 7:00 a.m. and 6:00 p.m., and limit high-noise-generating construction activities (e.g., Page 7-20 Jurupa Valley General Plan Update, 2017 grading, demolition, pile driving) near sensitive receptors to weekdays between 9:00 a.m. and 3:00 p.m.

NE 3.7 Automobile-Oriented Uses. Require that parking structures, terminals, drive-through restaurants, automobile sales and repair, fueling stations, minimarts, car washes, and similar automobile-oriented uses be sited and designed to minimize potential noise impacts on adjacent land uses.

5.0 Study Method and Procedure

The following section describes the noise modeling procedures and assumptions used for this assessment.

5.1 Noise Measurement Procedure and Criteria

Noise measurements are taken to determine the existing noise levels. A noise receiver or receptor is any location in the noise analysis in which noise might produce an impact. The following criteria are used to select measurement locations and receptors:

- Locations expected to receive the highest noise impacts, such as the first row of houses
- Locations that are acoustically representative and equivalent of the area of concern
- Human land usage
- Sites clear of major obstruction and contamination

MD conducted the sound level measurements in accordance to City's noise ordinance, the Federal Highway Transportation (FHWA) and Caltrans (TeNS) technical noise specifications. All measurement equipment meets American National Standards Institute (ANSI) specifications for sound level meters (S1.4-1983 identified in Chapter 19.68.020.AA). The following gives a brief description of the Caltrans Technical Noise Supplement procedures for sound level measurements:

- Microphones for sound level meters were placed 5-feet above the ground for all measurements
- Sound level meters were calibrated (Larson Davis CAL 200) before and after each measurement
- Following the calibration of equipment, a windscreen was placed over the microphone
- Frequency weighting was set on "A" and slow response
- Results of the long-term noise measurements were recorded on field data sheets
- During any short-term noise measurements, any noise contaminations such as barking dogs, local traffic, lawn mowers, or aircraft fly-overs were noted
- Temperature and sky conditions were observed and documented

5.2 Noise Measurement Locations

Noise monitoring locations were selected based on the project site's boundary. One (1) Long-term 24 hour noise measurement was conducted at the site's property line and is illustrated in Exhibit E. Appendix A includes photos, field sheet, and measured noise data.

5.3 Stationary Noise Modeling

SoundPLAN (SP) acoustical modeling software was utilized to model future worst-case stationary noise impacts to the adjacent land uses. SP is capable of evaluating multiple stationary noise source impacts at various receiver locations. SP's software utilizes algorithms (based on the inverse square law and reference equipment noise level data) to calculate noise level projections. The software allows the user to input specific noise sources, spectral content, sound barriers, building placement, topography, and sensitive receptor locations.

The future worst-case noise level projections were modeled using referenced sound level data for the various stationary on-site sources (parking spaces and loading docks). The model assumes that the

building facility has four (4) rooftop HVAC units, and approximately 21 parking spaces, and 79 RV parking spaces.

Rooftop HVAC units were modeled as point sources with a reference noise level per manufacturer cut sheets. The model does not include parapets, which are anticipated and will further reduce the noise levels.

Parking was modeled as 1 car movement per parking space per hour.

The SP model assumes that all noise sources are operating simultaneously (worst-case scenario) when in actuality the noise will be intermittent and lower in noise level.

Finally, the model is able to evaluate the noise attenuating effects of any existing or proposed property line walls. Input and output calculations are provided in Appendix C.

Table 2: Reference Sound Level Measurements for SoundPLAN Model

Source	Source Type	Reference Level (dBA)	Descriptor
Rooftop HVAC Unit	Point Source	79-83	Sound Power
Parking	Area (SP Parking Tool)	-	1 movement per hr

5.4 FHWA Roadway Construction Noise Model

The construction noise analysis utilizes the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RNCM), together with several key construction parameters. Key inputs include distance to the sensitive receiver, equipment usage, % usage factor, and baseline parameters for the project site.

The project was analyzed based on the different construction phases. Construction noise is expected to be loudest during the grading, concrete and building phases of construction. The construction noise calculation output worksheet is located in Appendix D. The following assumptions relevant to short-term construction noise impacts were used:

- It is estimated that construction will occur over a 12-month time period. Construction noise is expected to be the loudest during the grading, concrete, and building phases.

Exhibit E

Measurement Locations

6.0 Existing Noise Environment

One (1) twenty-four-hour ambient noise measurement was conducted at the project site. Noise measurements were taken to determine the existing ambient noise levels. Noise data indicates that traffic along I-15 Freeway is the primary sources of noise impacting the site and the surrounding area. Therefore, this assessment will utilize the ambient noise data as a basis and compare levels to said data.

6.1 Long-Term Noise Measurement Results

The results of the Long-term noise data are presented in Table 3.

Table 3: Long-Term Noise Measurement Data[1]

Date	Time	1-Hour dB(A)							
		L_{EQ}	L_{MAX}	L_{MIN}	L_2	L_8	L_{25}	L_{50}	L_{90}
4/21/2023	12AM-1AM	55.0	67.7	50.5	66.4	63.2	60.9	58.9	55.9
4/21/2023	1AM-2AM	52.6	65.3	50.6	66.5	63.3	61.0	59.0	56.0
4/21/2023	2AM-3AM	51.4	64.1	50.8	66.7	63.5	61.2	59.2	56.2
4/21/2023	3AM-4AM	49.6	62.3	52.0	67.9	64.7	62.4	60.4	57.4
4/21/2023	4AM-5AM	50.6	63.3	53.6	69.5	66.3	64.0	62.0	59.0
4/21/2023	5AM-6AM	54.4	67.1	53.2	69.1	65.9	63.6	61.6	58.6
4/21/2023	6AM-7AM	60.8	73.5	51.5	67.4	64.2	61.9	59.9	56.9
4/21/2023	7AM-8AM	63.1	75.8	50.1	66.0	62.8	60.5	58.5	55.5
4/21/2023	8AM-9AM	61.2	73.9	49.0	64.9	61.7	59.4	57.4	54.4
4/21/2023	9AM-10AM	60.2	72.9	48.3	64.2	61.0	58.7	56.7	53.7
4/21/2023	10AM-11AM	60.1	72.8	47.3	63.2	60.0	57.7	55.7	52.7
4/21/2023	11AM-12PM	60.3	73.0	46.7	62.6	59.4	57.1	55.1	52.1
4/21/2023	12PM-1PM	60.4	73.1	45.1	61.0	57.8	55.5	53.5	50.5
4/21/2023	1PM-2PM	60.5	73.2	42.7	58.6	55.4	53.1	51.1	48.1
4/21/2023	2PM-3PM	60.7	73.4	41.5	57.4	54.2	51.9	49.9	46.9
4/21/2023	3PM-4PM	61.9	74.6	39.7	55.6	52.4	50.1	48.1	45.1
4/21/2023	4PM-5PM	63.5	76.2	40.7	56.6	53.4	51.1	49.1	46.1
4/21/2023	5PM-6PM	63.1	75.8	44.5	60.4	57.2	54.9	52.9	49.9
4/21/2023	6PM-7PM	61.4	74.1	50.9	66.8	63.6	61.3	59.3	56.3
4/21/2023	7PM-8PM	60.0	72.7	53.2	69.1	65.9	63.6	61.6	58.6
4/21/2023	8PM-9PM	58.9	71.6	51.3	67.2	64.0	61.7	59.7	56.7
4/21/2023	9PM-10PM	58.2	70.9	50.3	66.2	63.0	60.7	58.7	55.7
4/21/2023	10PM-11PM	57.2	69.9	50.2	66.1	62.9	60.6	58.6	55.6
4/21/2023	11PM-12AM	56.6	69.3	50.4	66.3	63.1	60.8	58.8	55.8
CNEL		63.8							

Notes:

1. Long-term noise monitoring location (LT1) is illustrated in Exhibit E.

Noise data indicates the ambient noise level ranges between 49.6 dBA Leq to 63.5 dBA Leq depending on location. Additional field notes and photographs are provided in Appendix A. The quietest ambient noise measurement measured 49.6 dBA Leq. The study will compare the project noise levels to the quietest ambient noise level as a worst case scenario.

7.0 Future Noise Environment Impacts and Mitigation

This assessment analyzes future noise impacts as a result of the project. The analysis details the estimated exterior noise levels. Stationary noise impacts are analyzed from the on-site noise sources such as trucks loading and unloading.

7.1 Future Exterior Noise

The following outlines the exterior noise levels associated with the proposed project.

7.1.1 Noise Impacts to Off-Site Receptors Due to Stationary Sources

Adjacent uses that may be affected by project operational noise include residential to the north. The worst-case stationary noise was modeled using SoundPLAN acoustical modeling software. Worst-case assumes that all project activities are always operational when in reality the noise will be intermittent and cycle on/off depending on usage. Project operations are anticipated to occur 24 hours a day. The light density residential stationary noise limit of 45 dBA.

A total of seven (7) receptors were modeled to evaluate the proposed project's operational impact. A receptor is denoted by a yellow dot. All yellow dots represent a property line.

This study compares the Project's operational noise levels to two (2) different noise assessment scenarios: 1) Project Only operational noise level projections, 2) Project plus ambient noise level projections.

Project Operational Noise Levels
Exhibit F shows the "project only" operational noise levels at the property lines and adjacent areas. Exhibit F shows the noise contours at the project site and illustrates how the noise will propagate at the site. Operational noise levels at the adjacent uses are anticipated to range between 41 dBA to 44 dBA Leq (depending on the location).

The "project only" noise projections to the adjacent uses are below the City's nighttime 45 dBA light density residential limit, as outlined within the City's noise ordinance (see Section 4.3).

Project Plus Ambient Operational Noise Levels
Table 3 demonstrates the project plus the ambient noise levels. Project plus ambient noise level projections are anticipated measure 51 dBA Leq at receptors (R1 – R7).

<Table 3 Next Page>

Table 4: Worst-case Predicted Operational Leq Noise Level[1]

Receptor[1]	Floor	Existing Ambient Noise Level (dBA, Leq)[2]	Project Noise Level (dBA, Leq)[3]	Total Combined Noise Level (dBA, Leq)	Nighttime (10PM – 7AM) Stationary Noise Limit (dBA, Leq)	Change in Noise Level as Result of Project
1	1	50	43	51	**45**	1
2	1		43	51		1
3	1		44	51		1
4	1		43	51		1
5	1		43	51		1
6	1		42	51		1
7	1		41	51		1

Notes:
[1.] Receptor 1 -7 represents the noise level at the nearest residential receptors
[3.] See Exhibit f for the operational noise level projections at said receptors.

As shown in Table 4, the project will increase the worst-case noise level by approximately 1 dBA Leq at receptors (R1 – R7). It takes a change of 3 dBA to hear a noticeable difference. The increase in noise level is below the typical noticeable difference in change of noise levels.

Table 5 provides the characteristics associated with changes in noise levels.

Table 5: Change in Noise Level Characteristics[1]

Changes in Intensity Level, dBA	Changes in Apparent Loudness
1	Not perceptible
3	Just perceptible
5	Clearly noticeable
10	Twice (or half) as loud

https://www.fhwa.dot.gov/environMent/noise/regulations_and_guidance/polguide/polguide02.cfm

The change in noise level would fall within the “Not Perceptible” acoustic characteristic.

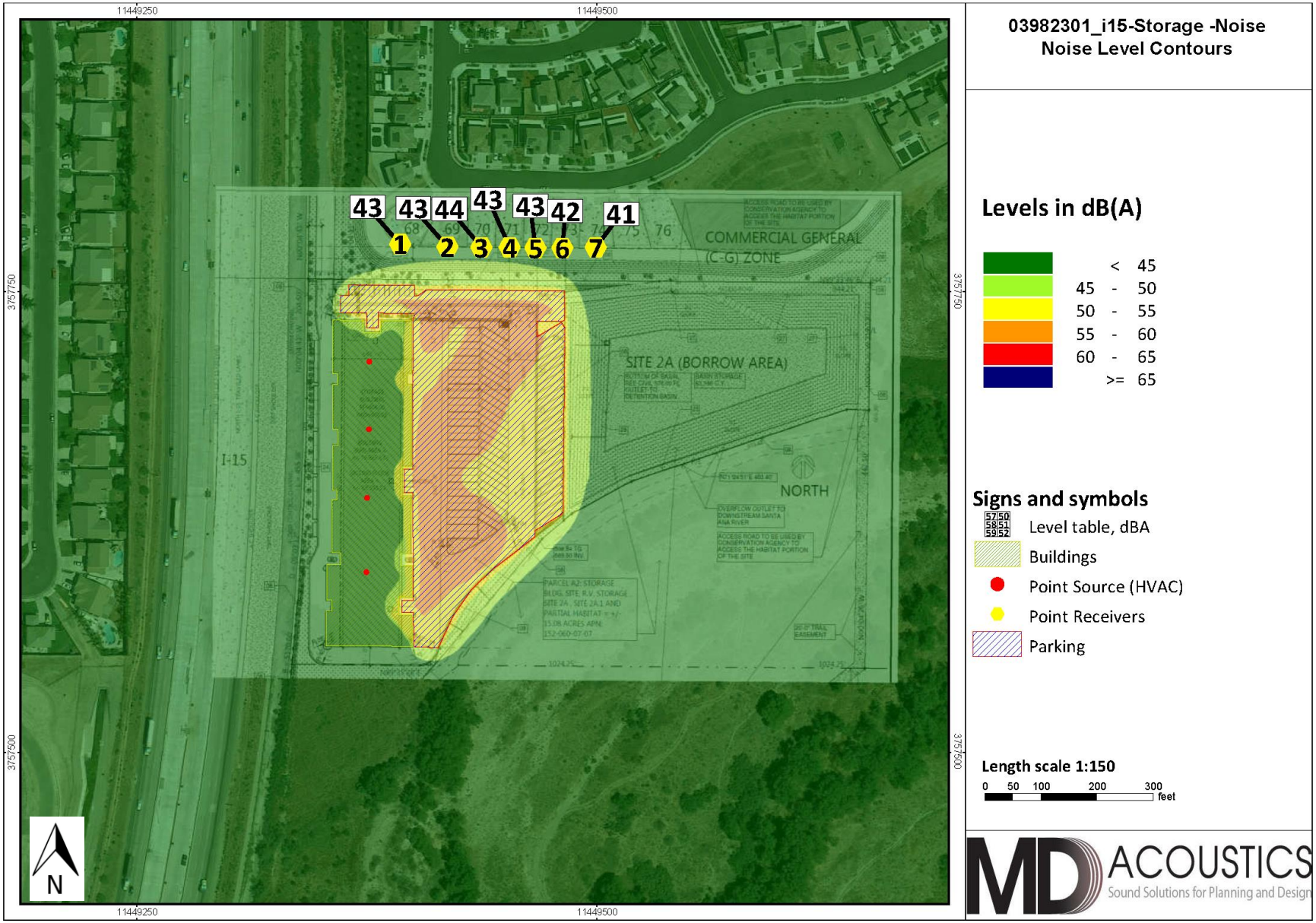
7.1.2 Noise Impacts to On/Off-Site Receptors Due to Project Generated Traffic

Traffic along the subject roadways would need to double in average daily traffic volumes to see a 3 dBA increase in noise level. The proposed project generates less than 50 peak hour trips and less than 250 daily trips. Therefore, based on the City of Jurupa Valley Traffic Impact Analysis Guidelines, the proposed project does not require a TIA that includes LOS analysis or a comprehensive VMT assessment per the memo provided by TJW Engineering, 4/13/2023 (*Jurupa Valley Self-Storage Trip Generation and VMT Analysis*), see Appendix B.

Since the project generates a nominal amount of traffic relative to the existing ADTs, the project's traffic noise level increase would be nominal and therefore less than significant.

Exhibit F

Operational Noise Levels



8.0 Construction Noise Impact

The degree of construction noise may vary for different areas of the project site and also vary depending on the construction activities. Noise levels associated with the construction will vary with the different phases of construction.

8.1 Construction Noise

The Environmental Protection Agency (EPA) has compiled data regarding the noise generated characteristics of typical construction activities. The data is presented in Table 6.

Table 6: Typical Construction Equipment Noise Levels[1]

Type	Lmax (dBA) at 50 Feet
Backhoe	80
Truck	88
Concrete Mixer	85
Pneumatic Tool	85
Pump	76
Saw, Electric	76
Air Compressor	81
Generator	81
Paver	89
Roller	74

Notes:
[1] Referenced Noise Levels from FTA noise and vibration manual.

Construction is considered a short-term impact and would be considered significant if construction activities are taken outside the allowable times as described in the City's Noise Element Section 11.05.040 Table 1. Construction is anticipated to occur during the permissible hours according to the City's Municipal Code. Construction noise will have a temporary or periodic increase in the ambient noise level above the existing within the project vicinity. Furthermore, noise reduction measures are provided to further reduce construction noise. The impact is considered less than significant however construction noise level projections are provided.

Typical operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Noise levels will be loudest during site preparation phase. A likely worst-case construction noise scenario during site preparation assumes the use of 4-tractors, and 3-dozers operating at 290 feet from the property boundary.

Assuming a usage factor of 40 percent for each piece of equipment, unmitigated noise levels at 290 feet have the potential to reach 67.4 dBA L_{eq} at the property boundary during site preparation.

8.2 Construction Vibration

Construction activities can produce vibration that may be felt by adjacent land uses. The construction of the proposed project would not require the use of equipment such as pile drivers, which are known to generate substantial construction vibration levels. The primary vibration source during construction may be from a bulldozer. A large bulldozer has a vibration impact of 0.089 inches per second peak particle velocity (PPV) at 25 feet which is perceptible but below any risk to architectural damage.

The fundamental equation used to calculate vibration propagation through average soil conditions and distance is as follows:

$$PPV_{equipment} = PPV_{ref} (100/D_{rec})^n$$

Where: PPV_{ref} = reference PPV at 100ft.
D_{rec} = distance from equipment to receiver in ft.
n = 1.1 (the value related to the attenuation rate through ground)

The thresholds from the Caltrans Transportation and Construction Induced Vibration Guidance Manual in Table 7 (below) provides general thresholds and guidelines as to the vibration damage potential from vibratory impacts.

Table 7: Guideline Vibration Damage Potential Threshold Criteria

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

Source: Table 19, Transportation and Construction Vibration Guidance Manual, Caltrans, Sept. 2013.
Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Table 8 gives approximate vibration levels for particular construction activities. This data provides a reasonable estimate for a wide range of soil conditions.

<Table 8, next page>

Table 8: Vibration Source Levels for Construction Equipment[1]

Equipment	Peak Particle Velocity (inches/second) at 25 feet	Approximate Vibration Level LV (dVB) at 25 feet
Pile driver (impact)	1.518 (upper range)	112
	0.644 (typical)	104
Pile driver (sonic)	0.734 upper range	105
	0.170 typical	93
Clam shovel drop (slurry wall)	0.202	94
Hydromill	0.008 in soil	66
(slurry wall)	0.017 in rock	75
Vibratory Roller	0.21	94
Hoe Ram	0.089	87
Large bulldozer	0.089	87
Caisson drill	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58

[1] Source: Transit Noise and Vibration Impact Assessment, Federal Transit Administration, May 2006.

At a distance of 67 feet (distance of nearest structure from the site's eastern boundary), a large bulldozer would yield a worst-case 0.030 PPV (in/sec) which may be perceptible for short periods of time during grading along the eastern property line of the project site, but is below any threshold of damage. The impact is less than significant, and no mitigation is required.

8.3 Construction Noise Reduction Measures

Construction operations must follow the City's General Plan and the Noise Ordinance, which states that construction, repair or excavation work performed must occur within the permissible hours. To further ensure that construction activities do not disrupt the adjacent land uses, the following measures should be taken:

1. Construction should occur during the permissible hours as defined in NE3.5 Policy and Section 11.05.020.

2. During construction, the contractor shall ensure all construction equipment is equipped with appropriate noise attenuating devices.

3. The contractor should locate equipment staging areas that will create the greatest distance between construction-related noise/vibration sources and sensitive receptors nearest the project site during all project construction.

4. Idling equipment should be turned off when not in use.

5. Equipment shall be maintained so that vehicles and their loads are secured from rattling and banging.

9.0 References

State of California General Plan Guidelines: 1998. Governor's Office of Planning and Research

City of Jurupa Valley: General Plan Noise Element. Chapter 7.

Traffic Engineering & Transportation Planning Consulting (TJW) – Jurupa Valley Self-Storage Trip Generation and VMT Analysis, City of Jurupa Valley – 4/14/2023

Appendix A:

Photographs and Field Measurement Data

MD ACOUSTICS
Sound Solutions for Planning and Design
www.mdacoustics.com

AZ Office
4960 S. Gilbert Rd, Ste 1-461
Chandler, AZ 85249

CA Office
1197 E Los Angeles Ave, C-256
Simi Valley, CA 93065

24-Hour Continuous Noise Measurement Datasheet

Project:	I-15/Jurupa Valley Storage Noise	**Site Observations:**	Clear Sky, Meter at the northwest corner of the site as close to the homes as possible.
Site Address/Location:	East side of 1-15 freeway, Jurupa Valley CA		
Date:	4/21/2023 to 4/22/2022		
Field Tech/Engineer:	Jason Schuyler		

General Location:

Sound Meter:	NTi XL2 **SN:** 80206	**Site Topo:**	Flat
Settings:	A-weighted, slow, 1-min, 24-hour duration	**Ground Type:**	Soft site, Open raw ground with a road
Meteorological Con.:	88 degrees F, 1 to 3 mph wind, west to east diretion		
Site ID:	LT-1		

Noise Source(s) w/ Distance:
C/L of I-15 is 265 feet from meter

Figure 1: LT-1 Monitoring Location

Figure 2: LT-1 Photo

MD ACOUSTICS
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AZ Office
4960 S. Gilbert Rd, Ste 1-461
Chandler, AZ 85249

CA Office
1197 E Los Angeles Ave, C-256
Simi Valley, CA 93065

24-Hour Noise Measurement Datasheet - Cont.

Project: I-15/Jurupa Valley Storage Noise **Day:** 1 of 1

Site Address/Location: East side of 1-15 freeway, Jurupa Valley CA

Site ID: LT-1

Date	Start	Stop	Leq	Lmax	Lmin	L2	L8	L25	L50	L90
4/21/2023	12:00 AM	1:00 AM	55.0	67.7	50.5	66.4	63.2	60.9	58.9	55.9
4/21/2023	1:00 AM	2:00 AM	52.6	65.3	50.6	66.5	63.3	61.0	59.0	56.0
4/21/2023	2:00 AM	3:00 AM	51.4	64.1	50.8	66.7	63.5	61.2	59.2	56.2
4/21/2023	3:00 AM	4:00 AM	49.6	62.3	52.0	67.9	64.7	62.4	60.4	57.4
4/21/2023	4:00 AM	5:00 AM	50.6	63.3	53.6	69.5	66.3	64.0	62.0	59.0
4/21/2023	5:00 AM	6:00 AM	54.4	67.1	53.2	69.1	65.9	63.6	61.6	58.6
4/21/2023	6:00 AM	7:00 AM	60.8	73.5	51.5	67.4	64.2	61.9	59.9	56.9
4/21/2023	7:00 AM	8:00 AM	63.1	75.8	50.1	66.0	62.8	60.5	58.5	55.5
4/21/2023	8:00 AM	9:00 AM	61.2	73.9	49.0	64.9	61.7	59.4	57.4	54.4
4/21/2023	9:00 AM	10:00 AM	60.2	72.9	48.3	64.2	61.0	58.7	56.7	53.7
4/21/2023	10:00 AM	11:00 AM	60.1	72.8	47.3	63.2	60.0	57.7	55.7	52.7
4/21/2023	11:00 AM	12:00 PM	60.3	73.0	46.7	62.6	59.4	57.1	55.1	52.1
4/21/2023	12:00 PM	1:00 PM	60.4	73.1	45.1	61.0	57.8	55.5	53.5	50.5
4/21/2023	1:00 PM	2:00 PM	60.5	73.2	42.7	58.6	55.4	53.1	51.1	48.1
4/21/2023	2:00 PM	3:00 PM	60.7	73.4	41.5	57.4	54.2	51.9	49.9	46.9
4/21/2023	3:00 PM	4:00 PM	61.9	74.6	39.7	55.6	52.4	50.1	48.1	45.1
4/21/2023	4:00 PM	5:00 PM	63.5	76.2	40.7	56.6	53.4	51.1	49.1	46.1
4/21/2023	5:00 PM	6:00 PM	63.1	75.8	44.5	60.4	57.2	54.9	52.9	49.9
4/21/2023	6:00 PM	7:00 PM	61.4	74.1	50.9	66.8	63.6	61.3	59.3	56.3
4/21/2023	7:00 PM	8:00 PM	60.0	72.7	53.2	69.1	65.9	63.6	61.6	58.6
4/21/2023	8:00 PM	9:00 PM	58.9	71.6	51.3	67.2	64.0	61.7	59.7	56.7
4/21/2023	9:00 PM	10:00 PM	58.2	70.9	50.3	66.2	63.0	60.7	58.7	55.7
4/21/2023	10:00 PM	11:00 PM	57.2	69.9	50.2	66.1	62.9	60.6	58.6	55.6
4/21/2023	11:00 PM	12:00 AM	56.6	69.3	50.4	66.3	63.1	60.8	58.8	55.8

CNEL: 63.8

MD ACOUSTICS
Sound Solutions for Planning and Design
www.mdacoustics.com

AZ Office
4960 S. Gilbert Rd, Ste 1-461
Chandler, AZ 85249

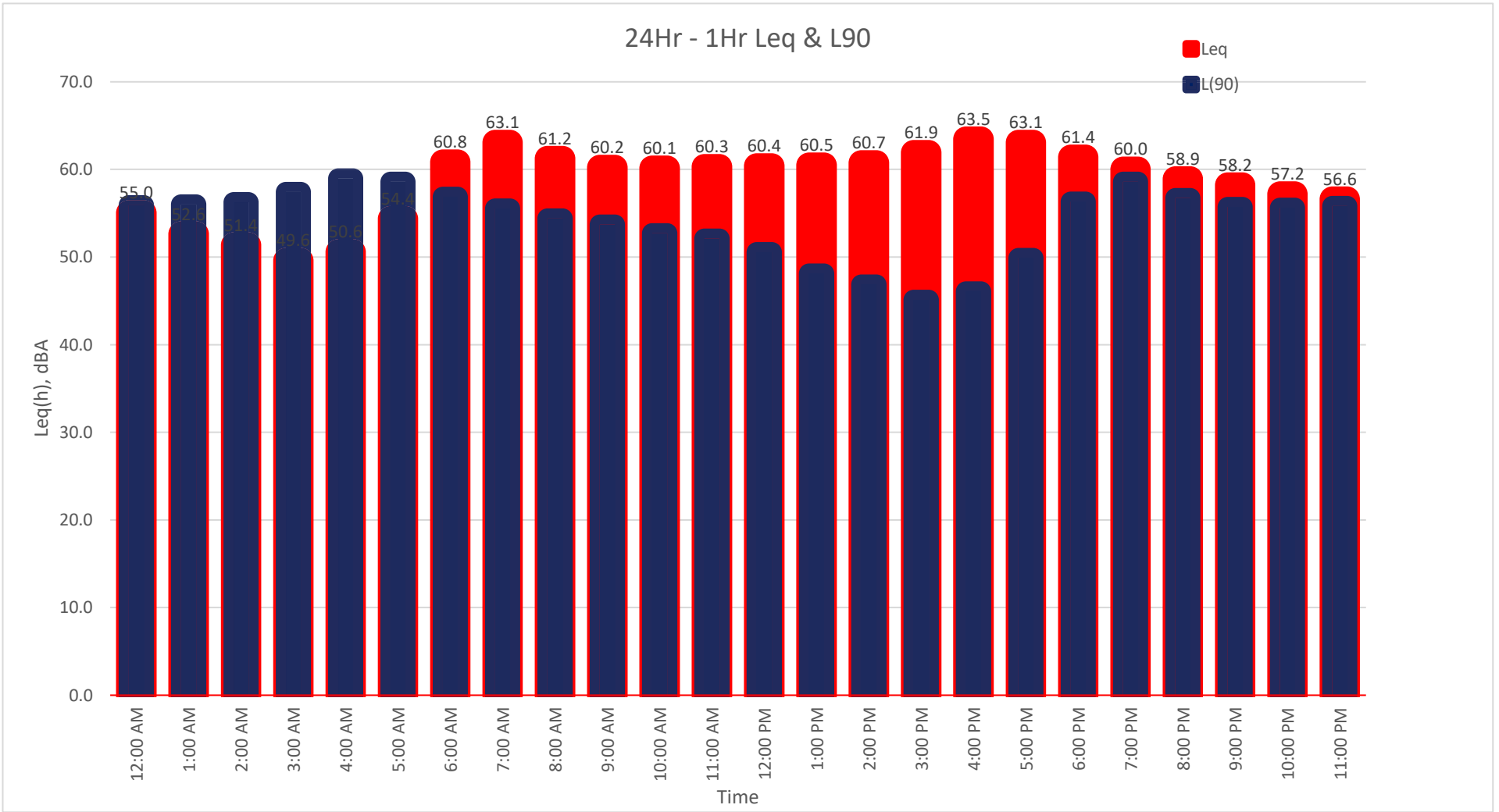
CA Office
1197 E Los Angeles Ave, C-256
Simi Valley, CA 93065

24-Hour Continuous Noise Measurement Datasheet - Cont.

Project: I-15/Jurupa Valley Storage Noise **Day:** 1 of 1

Site Address/Location: East side of 1-15 freeway, Jurupa Valley CA

Site ID: LT-1



Appendix B:
TJW Engineering Memo

April 14, 2023

TJW ENGINEERING, INC.
TRAFFIC ENGINEERING &
TRANSPORTATION PLANNING
CONSULTANTS

Mr. Steve Galvez
20 Paseo Verde
San Clemente, CA 92673

SUBJECT: Jurupa Valley Self-Storage Trip Generation and VMT Analysis, City of Jurupa Valley

Dear Mr. Galvez,

*TJW Engineering, Inc. (*TJW*)* is pleased to submit this Trip Generation and Vehicle Miles Traveled (VMT) Analysis for the proposed project located south of 68th Street and Pats Ranch Road in the City of Jurupa Valley. The proposed project is a 135,365 square foot self-storage facility. A site plan is attached for reference. The purpose of this memorandum is to summarize the project Trip Generation and VMT.

Proposed Project

The project site is located south of 68th Street and Pats Ranch Road in the City of Jurupa Valley. The project will construct a 135,365 square foot self-storage facility. Site access will be provided via access road from 68th Street between I-15 and the adjacent existing homes.

LOS Analysis Threshold and Trip Generation

The need to evaluate LOS for the proposed project was evaluated based on the City of Jurupa Valley Traffic Impact Analysis Guidelines (November 2020). The guidelines state land uses that generate less than 50 peak hour trips will not require a TIA that includes LOS analysis.

The trip generation for the proposed project was determined using the Institute of Transportation Engineers Trip Generation Manual (11th Edition). Based on the proposed project's intended use, the projected trip generation was determined using the Mini-Warehouse Land Use Code 151. The proposed project is projected to generate 12 total AM peak hour trips, 20 total PM peak hour trips, and 196 total daily trips.

Table 1 – Trip Generation

Proposed Land Use	Qty	Unit	Daily Trips (ADTs)		AM Peak Hour					PM Peak Hour				
			Rate	Volume	Rate	In:Out Split	Volume			Rate	In:Out Split	Volume		
							In	Out	Total			In	Out	Total
Mini-Warehouse (151)	135.365	TSF	1.45	196	0.09	59:41	7	5	12	0.15	47:53	9	11	20
Total				**196**			**7**	**5**	**12**			**9**	**11**	**20**

Notes: ITE Trip Generation (11th Edition, 2021); TSF = Thousand Square Feet.

Vehicle Miles Traveled (VMT)

Senate Bill (SB) 743 was adopted in 2013 requiring the Governor's Office of Planning and Research (OPR) to identify new metrics for identifying and mitigating transportation impacts within the California Environmental Quality Act (CEQA). For land use projects, OPR has identified Vehicle Miles Traveled (VMT) as the new metric for transportation analysis under CEQA. The regulatory changes to the CEQA guidelines that implement SB 743 were approved on December 28th, 2018 with an implementation date of July 1st, 2020 as the new metric.

The City of Jurupa Valley updated their Transportation Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment in November 2020. The document outlines guidelines for CEQA analysis including screening criteria and requirements for VMT assessment of land use projects. The VMT guidelines provide several screening criteria for projects including Transit Priority Area (TPA) Screening, Low VMT Area Screening, and Project Type Screening.

The City of Jurupa Valley VMT Analysis Guidelines indicates projects generating less than 250 daily vehicle trips may be presumed to have a less than significant impact based on substantial evidence provided in the OPR Technical Advisory supporting SB 743 implementation. Thus, the project can be considered low vehicle trip generating and is presumed to have a less than significant impact on VMT.

Summary

This memorandum provides an overview of the trip generation and VMT analysis for the proposed project. Based on the City of Jurupa Valley Traffic Impact Analysis Guidelines (November 2020), the proposed project generates less than 50 peak hour trips and less than 250 daily trips. Therefore, the project does not require a TIA that includes LOS analysis or a comprehensive VMT assessment.

Please contact us at (949) 878-3509 if you have any questions regarding this analysis.

Sincerely,

Thomas Wheat, PE, TE
President

David Chew, PTP
Transportation Planner

Registered Civil Engineer *#69467*
Registered Traffic Engineer *#2565*

Brandon Alvarado, EIT
Transportation Planner

Appendix C:

SoundPlan Input/Output

Capacity ratings

AHRI RATINGS

COOLING MODE

50GCQ	NOM. CAPACITY (tons)	NET COOLING CAPACITY (Btuh)	TOTAL POWER (kW)	SEER	EER
M04	3	35,000	2.8	16.2	12.5
M05	4	47,500	3.9	16.2	12.2
M06	5	60,000	4.9	16.2	12.2

HEATING MODE

50GCQ	HSPF	HIGH HEATING CAPACITY (Btuh)	HIGH HEAT COP	LOW HEATING CAPACITY (Btuh)	LOW HEAT COP
M04	8.3	34,000	3.8	17,600	2.4
M05	8.3	45,500	3.7	24,400	2.3
M06	8.3	55,500	3.9	30,000	2.4

LEGEND

AHRI — Air Conditioning, Heating and Refrigeration Institute
ASHRAE — American Society of Heating, Refrigerating and Air Conditioning Engineers
COP — Coefficient of Performance
EER — Energy Efficiency Ratio
HSPF — Heating Seasonal Performance Factor
SEER — Seasonal Energy Efficiency Ratio

NOTES:

1. Rated and certified under AHRI Standard 210/240.
2. Ratings are based on:
   Cooling Standard: 80°F (27°C) db, 67°F (19°C) wb indoor air temperature and 95°F (35°C) db outdoor air temperature.
   High Temperature Heating Ratings: 47°F (8°C) db, 43°F (6°C) wb outdoor air temperature and 70°F (21°C) entering indoor coil air.
   Low Temperature Heating Ratings: 17°F (–8°C) db, 15°F (–9°C) wb outdoor air temperature and 70°F (21°C) entering indoor coil air.
3. All 50GCQ units comply with ASHRAE 90.1 Energy Standard for minimum SEER and EER requirements.

SOUND RATINGS TABLE

50GCQ UNIT	COOLING STAGES	OUTDOOR SOUND (dB) AT 60 Hz								
		A-WEIGHTED	63	125	250	500	1000	2000	4000	8000
M04	2	75.4	81.8	81.8	77.0	72.6	69.9	64.6	59.3	55.6

LEGEND

dB — Decibel

NOTES:

1. Outdoor sound data is measured in accordance with AHRI.
2. Measurements are expressed in terms of sound power. Do not compare these values to sound pressure values because sound pressure depends on specific environmental factors which normally do not match individual applications. Sound power values are independent of the environment and therefore more accurate.
3. A-weighted sound ratings filter out very high and very low frequencies, to better approximate the response of “average” human ear. A-weighted measurements for Carrier units are taken in accordance with AHRI.

MINIMUM - MAXIMUM AIRFLOW RATINGS (CFM) — COOLING UNITS AND ACCESSORY ELECTRIC HEAT

UNIT	COOLING				ELECTRIC HEAT*	
	MINIMUM AIRFLOW CFM	MINIMUM 2-SPEED AIRFLOW (LOW SPEED)	MINIMUM 2-SPEED AIRFLOW (HIGH SPEED)	MAXIMUM AIRFLOW CFM	MINIMUM AIRFLOW CFM	MAXIMUM ARIFLOW CFM
50GCQM04	900	675	900	1500	900	1500
50GCQM05	1200	900	1200	2000	1200	2000
50GCQM06	1500	1125	1500	2500	1500	2500

* Electric heat modules are available as both factory-installed options or field-installed accessories for 50GCQ units.

MINIMUM - MAXIMUM AIRFLOWS (CFM) COOLING AND ELECTRIC HEAT

UNIT	COOLING			ELECTRIC HEATERS		
	Minimum CFM	Minimum CFM 2-Speed Fan Motor (at High Speed)	Minimum CFM 2-Speed Fan Motor (at Low Speed)	Maximum CFM	Minimum CFM	Maximum CFM
50HCQA04	900	N/A	N/A	1500	900	1500
50HCQA05	1200	N/A	N/A	2000	1200	2000
50HCQA06	1500	N/A	N/A	2500	1500	2500
50HCQA07	1800	N/A	N/A	3000	1800	3000
50HCQD07	1800	1800	1200	3000	1800	3000
50HCQD08	2250	2250	1500	3750	2250*	3750
50HCQD09	2550	2873	1915	4250	2252*	4250
50HCQD12	3000	3380	2253	5000	3000*	5000

* Minimum electric heat CFM exceptions:

UNIT	UNIT VOLTAGE	HEATER kW	UNIT CONFIGURATION	REQUIRED MINIMUM CFM
50HCQD08 50HCQD09	575	17.0	Horizontal or Vertical	2800
		34.0		2350
50HCQD12	230	50.0	Vertical	3550
		50.0	Horizontal	3420
		43.5	Horizontal or Vertical	3040
	575	50.0	Vertical	3150
		33.5	Vertical	3520
		33.5	Horizontal	3420
		26.5	Vertical	3610

SOUND PERFORMANCE

50HCQ UNIT	OUTDOOR SOUND (dB) AT 60 Hz								
	A-Weighted	63	125	250	500	1000	2000	4000	8000
A04	76	51.8	69.0	64.6	67.8	70.7	63.8	60.9	59.0
A05	79	56.1	69.6	68.7	72.5	72.8	68.9	65.0	61.2
A06	79	57.7	66.6	68.7	72.9	74.5	71.1	67.6	62.6
A07	81	86.7	82.7	79.1	78.4	75.4	71.2	67.8	62.9
D07	81	86.7	82.7	79.1	78.4	75.4	71.2	67.8	62.9
D09	87	61.7	74.7	77.4	82.6	84.9	81.9	78.8	75.9
D12	83	61.0	67.3	75.1	77.7	78.1	75.5	71.2	66.7

LEGEND

dB —Decibel

NOTES:

1. Outdoor sound data is measure in accordance with AHRI standard 270.
2. Measurements are expressed in terms of sound power. Do not compare these values to sound pressure values because sound pressure depends on specific environmental factors which normally do not match individual applications. Sound power values are independent of the environment and therefore more accurate.
3. A-weighted sound ratings filter out very high and very low frequencies, to better approximate the response of “average” human ear. A-weighted measurements for Carrier units are taken in accordance with AHRI standard 270.

i15-Storage -Noise
Contribution spectra - 001 - i15-Storage: Outdoor SP

Time slice	Sum	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz	12.5kHz	16kHz	20kHz	
	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	
Receiver R1 Fl G Lr,lim dB(A) Leq,d 42.6 dB(A)																																
Leq,d	42.6					28.7			37.7			26.1			32.3			35.4			36.1			31.9			21.5			-0.7		
Leq,d	13.3	-36.6	-30.6	-26.6	-13.6	-8.6	-14.6	-6.6	-4.7	-5.8	-3.8	-3.8	-1.8	-0.9	0.1	4.0	5.7	1.6	3.4	4.4	1.8	2.1	-2.3	-3.3	-8.4	-13.2	-25.3	-40.8	-57.4	-80.8		
Leq,d	15.8	-34.4	-28.4	-24.4	-11.4	-6.4	-12.4	-4.4	-2.5	-3.5	-1.6	-1.5	0.4	1.4	2.3	6.3	8.1	3.9	5.8	6.9	4.4	4.8	0.8	0.3	-4.2	-7.9	-18.5	-31.6	-44.9	-64.0	-88.7	
Leq,d	18.7	-31.7	-25.7	-21.7	-8.7	-3.7	-9.7	-1.7	0.2	-0.8	1.2	1.2	3.1	4.1	5.1	9.0	10.9	6.8	8.6	9.8	7.5	8.0	4.3	4.1	0.4	-2.4	-11.5	-22.4	-32.7	-47.8	-67.6	
Leq,d	22.8	-27.9	-21.9	-17.9	-4.9	0.1	-5.9	2.1	4.0	3.0	5.0	5.0	7.0	8.0	9.0	12.9	14.8	10.7	12.7	13.8	11.6	12.3	8.8	9.1	6.0	4.2	-3.4	-12.3	-19.7	-30.8	-45.7	
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Receiver R2 Fl G Lr,lim dB(A) Leq,d 43.4 dB(A)																																
Leq,d	43.4					29.2			38.3			26.9			33.1			36.4			37.1			32.9			22.3			-0.5		
Leq,d	13.1	-36.7	-30.7	-26.7	-13.7	-8.8	-14.8	-6.8	-4.8	-5.9	-3.9	-3.9	-2.0	-1.1	-0.1	3.8	5.6	1.4	3.2	4.2	1.7	1.9	-2.5	-3.5	-8.7	-13.6	-25.9	-41.5	-58.3	-82.0		
Leq,d	15.5	-34.7	-28.6	-24.6	-11.7	-6.7	-12.7	-4.7	-2.7	-3.8	-1.8	-1.8	0.1	1.1	2.1	6.0	7.8	3.6	5.5	6.6	4.1	4.5	0.4	-0.2	-4.6	-8.5	-19.2	-32.6	-46.3	-65.8	-91.1	
Leq,d	18.2	-32.2	-26.2	-22.2	-9.2	-4.2	-10.2	-2.2	-0.3	-1.3	0.7	0.7	2.6	3.6	4.6	8.5	10.3	6.2	8.1	9.2	6.9	7.4	3.6	3.4	-0.4	-3.4	-12.7	-24.0	-34.8	-50.6	-71.2	
Leq,d	21.6	-29.1	-23.1	-19.1	-6.1	-1.1	-7.1	0.9	2.9	1.8	3.8	3.8	5.8	6.8	7.8	11.7	13.6	9.5	11.4	12.6	10.3	11.0	7.4	7.6	4.3	2.2	-5.8	-15.3	-23.4	-35.7	-51.9	
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Receiver R3 Fl G Lr,lim dB(A) Leq,d 43.5 dB(A)																																
Leq,d	43.5					29.2			38.3			27.0			33.2			36.5			37.2			33.0			22.4			-0.4		
Leq,d	12.9	-37.0	-31.0	-27.0	-14.0	-9.0	-15.0	-7.0	-5.1	-6.2	-4.2	-4.2	-2.2	-1.3	-0.3	3.6	5.3	1.1	2.9	4.0	1.4	1.6	-2.8	-3.9	-9.2	-14.2	-26.7	-42.6	-59.8	-84.1		
Leq,d	15.0	-35.0	-29.0	-25.0	-12.0	-7.1	-13.1	-5.1	-3.1	-4.2	-2.2	-2.2	-0.2	0.7	1.7	5.6	7.4	3.2	5.1	6.2	3.7	4.0	-0.1	-0.7	-5.3	-9.4	-20.3	-34.1	-48.3	-68.5	-94.7	
Leq,d	17.5	-32.8	-26.8	-22.8	-9.8	-4.9	-10.9	-2.9	-0.9	-2.0	0.0	0.0	2.0	3.0	3.9	7.9	9.7	5.6	7.4	8.6	6.2	6.7	2.8	2.5	-1.5	-4.6	-14.3	-26.1	-37.6	-54.2	-75.9	
Leq,d	20.4	-30.3	-24.3	-20.3	-7.3	-2.3	-8.3	-0.3	1.6	0.6	2.6	2.6	4.5	5.5	6.5	10.4	12.3	8.2	10.1	11.5	9.6	10.1	6.3	6.2	2.5	0.0	-8.6	-18.7	-27.9	-41.4	-59.3	
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Receiver R4 Fl G Lr,lim dB(A) Leq,d 43.3 dB(A)																																
Leq,d	43.3					29.1			38.2			26.7			32.9			36.3			37.0			32.8			22.0			-0.6		

i15-Storage -Noise
Contribution spectra - 001 - i15-Storage: Outdoor SP

Time slice	Sum	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz	12.5kHz	16kHz	20kHz	
	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	
Leq,d	12.6	-37.2	-31.2	-27.2	-14.2	-9.3	-15.3	-7.3	-5.3	-6.4	-4.4	-4.4	-2.5	-1.6	-0.6	3.3	5.0	0.9	2.6	3.7	1.1	1.2	-3.2	-4.4	-9.7	-14.9	-27.6	-43.8	-61.5	-86.4		
Leq,d	14.6	-35.4	-29.4	-25.4	-12.4	-7.5	-13.5	-5.5	-3.5	-4.6	-2.6	-2.6	-0.7	0.3	1.3	5.2	7.0	2.8	4.6	5.7	3.2	3.5	-0.6	-1.4	-6.1	-10.3	-21.6	-35.7	-50.5	-71.4	-98.6	
Leq,d	17.1	-33.5	-27.4	-23.5	-10.5	-5.5	-11.5	-3.5	-1.5	-2.6	-0.6	-0.6	1.3	2.3	3.3	7.2	9.0	4.9	7.4	8.5	6.1	6.5	2.4	1.9	-2.4	-5.8	-15.9	-28.2	-40.4	-57.9	-80.8	
Leq,d	19.1	-31.4	-25.3	-21.4	-8.4	-3.4	-9.4	-1.4	0.6	-0.5	1.5	1.5	3.5	4.4	5.4	9.4	11.2	7.1	9.0	10.1	7.8	8.4	4.7	4.6	0.9	-1.8	-10.7	-21.5	-31.5	-46.1	-65.4	
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Receiver R5 Fl G Lr,lim dB(A) Leq,d 42.7 dB(A)																																
Leq,d	42.7					28.2			37.3			26.3			32.5			35.9			36.7			32.3			21.5			-1.0		
Leq,d	12.3	-37.5	-31.5	-27.5	-14.5	-9.5	-15.5	-7.5	-5.6	-6.7	-4.7	-4.7	-2.8	-1.8	-0.9	3.0	4.8	0.6	2.4	3.4	0.8	0.9	-3.6	-4.8	-10.2	-15.6	-28.5	-45.1	-63.3	-88.8		
Leq,d	14.2	-35.8	-29.8	-25.8	-12.8	-7.9	-13.9	-5.8	-3.9	-5.0	-3.0	-3.0	-1.0	-0.1	0.9	4.8	6.6	2.4	4.2	5.3	2.8	3.1	-1.2	-2.0	-6.8	-11.2	-22.8	-37.3	-52.7	-74.4		
Leq,d	16.6	-34.1	-28.0	-24.1	-11.1	-6.1	-12.1	-4.1	-2.1	-3.2	-1.2	-1.2	0.7	1.7	2.7	6.6	8.4	4.3	6.1	8.5	6.1	6.4	2.3	1.7	-2.8	-6.6	-17.2	-30.2	-43.2	-61.7	-85.8	
Leq,d	18.1	-32.3	-26.3	-22.3	-9.3	-4.3	-10.3	-2.3	-0.4	-1.4	0.6	0.6	2.5	3.5	4.5	8.4	10.3	6.1	8.0	9.2	6.8	7.3	3.5	3.3	-0.6	-3.5	-12.9	-24.3	-35.2	-51.0	-71.8	
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Receiver R6 Fl G Lr,lim dB(A) Leq,d 41.9 dB(A)																																
Leq,d	41.9					27.6			36.6			25.2			31.4			35.1			35.9			31.4			20.0			-3.1		
Leq,d	11.9	-37.8	-31.8	-27.8	-14.8	-9.8	-15.9	-7.8	-5.9	-7.0	-5.0	-5.0	-3.1	-2.1	-1.2	2.7	4.4	0.3	2.0	3.0	0.4	0.5	-4.0	-5.3	-10.9	-16.4	-29.7	-46.7	-65.4	-91.7		
Leq,d	13.7	-36.3	-30.2	-26.3	-13.3	-8.3	-14.3	-6.3	-4.4	-5.4	-3.5	-3.4	-1.5	-0.6	0.4	4.3	6.1	1.9	3.7	4.8	2.2	2.5	-1.8	-2.7	-7.7	-12.3	-24.2	-39.3	-55.3	-78.0		
Leq,d	15.9	-34.7	-28.7	-24.7	-11.7	-6.7	-12.7	-4.7	-2.8	-3.9	-1.9	-1.9	0.1	1.0	2.0	5.9	7.7	3.6	5.4	7.9	5.4	5.7	1.5	0.8	-3.9	-8.0	-19.0	-32.6	-46.5	-66.1	-91.6	
Leq,d	17.0	-33.2	-27.2	-23.2	-10.2	-5.3	-11.3	-3.2	-1.3	-2.4	-0.4	-0.4	1.6	2.6	3.5	7.5	9.3	5.2	7.0	8.1	5.8	6.2	2.3	2.0	-2.1	-5.4	-15.3	-27.4	-39.3	-56.4	-78.9	
Leq,d																																
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Leq,d																																
Receiver R7 Fl G Lr,lim dB(A) Leq,d 40.9 dB(A)																																
Leq,d	40.8					27.5			36.3			23.2			29.6			33.8			34.5			29.7			17.1			-8.6		
Leq,d	11.4	-38.2	-32.2	-28.2	-15.2	-10.3	-16.3	-8.3	-6.3	-7.4	-5.4	-5.4	-3.5	-2.6	-1.6	2.3	4.0	-0.2	1.5	2.5	-0.1	-0.1	-4.7	-6.1	-11.8	-17.6	-31.3	-48.9	-68.5	-95.9		
Leq,d	13.8	-36.8	-30.8	-26.8	-13.8	-8.9	-14.9	-6.9	-4.9	-6.0	-4.0	-4.0	-2.1	-1.2	-0.2	3.7	5.5	2.9	4.6	5.6	3.0	3.1	-1.4	-2.6	-8.0	-13.2	-25.8	-41.8	-58.9	-82.9		

i15-Storage -Noise
Contribution spectra - 001 - i15-Storage: Outdoor SP

Time slice	Sum	25Hz	31.5Hz	40Hz	50Hz	63Hz	80Hz	100Hz	125Hz	160Hz	200Hz	250Hz	315Hz	400Hz	500Hz	630Hz	800Hz	1kHz	1.25kHz	1.6kHz	2kHz	2.5kHz	3.15kHz	4kHz	5kHz	6.3kHz	8kHz	10kHz	12.5kHz	16kHz	20kHz	
	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	
Leq,d	14.5	-35.5	-29.5	-25.5	-12.5	-7.5	-13.6	-5.5	-3.6	-4.7	-2.7	-2.7	-0.7	0.2	1.2	5.1	6.9	2.7	4.5	5.6	3.1	3.4	-0.7	-1.5	-6.2	-10.5	-21.8	-36.0	-50.9	-72.0	-99.3	
Leq,d	15.9	-34.3	-28.3	-24.3	-11.3	-6.3	-12.3	-4.3	-2.4	-3.5	-1.5	-1.4	0.5	1.5	2.4	6.3	8.1	4.0	5.9	7.0	4.5	4.9	0.9	0.4	-4.0	-7.7	-18.2	-31.3	-44.5	-63.4	-88.0	
Leq,d																																
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Leq,d																																
Leq,d																																

Source group	Source type	Tr. lane	Leq,d dB(A)	A dB	
Receiver R1 Fl G Lr,lim dB(A) Leq,d 42.6 dB(A)					
Default parking lot noise	PLot		42.6	0.0	
Default industrial noise	Point		22.8	0.0	
Default industrial noise	Point		18.7	0.0	
Default industrial noise	Point		15.8	0.0	
Default industrial noise	Point		13.3	0.0	
Receiver R2 Fl G Lr,lim dB(A) Leq,d 43.4 dB(A)					
Default parking lot noise	PLot		43.4	0.0	
Default industrial noise	Point		21.6	0.0	
Default industrial noise	Point		18.2	0.0	
Default industrial noise	Point		15.5	0.0	
Default industrial noise	Point		13.1	0.0	
Receiver R3 Fl G Lr,lim dB(A) Leq,d 43.5 dB(A)					
Default parking lot noise	PLot		43.5	0.0	
Default industrial noise	Point		20.4	0.0	
Default industrial noise	Point		17.5	0.0	
Default industrial noise	Point		15.0	0.0	
Default industrial noise	Point		12.9	0.0	
Receiver R4 Fl G Lr,lim dB(A) Leq,d 43.3 dB(A)					
Default parking lot noise	PLot		43.3	0.0	
Default industrial noise	Point		19.1	0.0	
Default industrial noise	Point		17.1	0.0	
Default industrial noise	Point		14.6	0.0	
Default industrial noise	Point		12.6	0.0	
Receiver R5 Fl G Lr,lim dB(A) Leq,d 42.7 dB(A)					
Default parking lot noise	PLot		42.7	0.0	
Default industrial noise	Point		18.1	0.0	
Default industrial noise	Point		16.6	0.0	
Default industrial noise	Point		14.2	0.0	
Default industrial noise	Point		12.3	0.0	
Receiver R6 Fl G Lr,lim dB(A) Leq,d 41.9 dB(A)					
Default parking lot noise	PLot		41.9	0.0	
Default industrial noise	Point		17.0	0.0	
Default industrial noise	Point		15.9	0.0	
Default industrial noise	Point		13.7	0.0	
Default industrial noise	Point		11.9	0.0	
Receiver R7 Fl G Lr,lim dB(A) Leq,d 40.9 dB(A)					
Default parking lot noise	PLot		40.8	0.0	
Default industrial noise	Point		15.9	0.0	
Default industrial noise	Point		14.5	0.0	
Default industrial noise	Point		13.8	0.0	
Default industrial noise	Point		11.4	0.0	

i15-Storage -Noise
Octave spectra of the sources in dB(A) - 001 - i15-Storage: Outdoor SP

Name	Source type	I or A m,m²	Li dB(A)	R'w dB	L'w dB(A)	Lw dB(A)	KI dB	KT dB	LwMax dB(A)	DO-Wall dB	Time histogram	Emission spectrum	63Hz dB(A)	125Hz dB(A)	250Hz dB(A)	500Hz dB(A)	1kHz dB(A)	2kHz dB(A)	4kHz dB(A)	8kHz dB(A)	16kHz dB(A)
	PLot	13552.87			50.6	91.9	0.0	0.0		0	100%/24h	Typical spectrum	75.2	86.8	79.3	83.8	83.9	84.3	81.6	75.4	62.6
HVAC	Point				74.9	74.9	0.0	0.0		0	100%/24h	HVAC: 67.7dB @ 3ft - Carrier 50TFQ0006 -	52.0	60.5	62.9	67.2	69.5	69.1	66.1	61.2	48.9
HVAC	Point				74.9	74.9	0.0	0.0		0	100%/24h	HVAC: 67.7dB @ 3ft - Carrier 50TFQ0006 -	52.0	60.5	62.9	67.2	69.5	69.1	66.1	61.2	48.9
HVAC	Point				74.9	74.9	0.0	0.0		0	100%/24h	HVAC: 67.7dB @ 3ft - Carrier 50TFQ0006 -	52.0	60.5	62.9	67.2	69.5	69.1	66.1	61.2	48.9
HVAC	Point				74.9	74.9	0.0	0.0		0	100%/24h	HVAC: 67.7dB @ 3ft - Carrier 50TFQ0006 -	52.0	60.5	62.9	67.2	69.5	69.1	66.1	61.2	48.9

Appendix D:
Construction Input

Receptor - Residences to the North

Construction Phase Equipment Item	# of Items	Item Lmax at 50 feet, dBA[1]	Edge of Site to Receptor, feet	Center of Site to Receptor, feet	Item Usage Percent[1]	Ground Factor[2]	Usage Factor	Receptor Item Lmax, dBA	Recptor. Item Leq, dBA
SITE PREP									
Tractor	4	84	76	290	40	0.66	0.40	79.2	59.7
Dozer	3	82	76	290	40	0.66	0.40	77.2	57.7
							Log Sum	79.2	67.4
GRADE									
Excavator	1	81	76	290	40	0.66	0.40	76.2	56.7
Grader	1	85	76	290	40	0.66	0.40	80.2	60.7
Dozer	1	82	76	290	40	0.66	0.40	77.2	57.7
Crane	3	81	76	290	16	0.66	0.16	76.2	52.7
Dozer	2	82	76	290	40	0.66	0.40	77.2	57.7
								80.2	66.0
BUILD									
Crane	1	81	76	290	16	0.66	0.16	76.2	52.7
Man lift	3	75	76	290	20	0.66	0.20	70.2	47.7
Generator	1	81	76	290	50	0.66	0.50	76.2	57.7
Tractor	3	84	76	290	40	0.66	0.40	79.2	59.7
Welder/Torch	1	74	76	290	40	0.66	0.40	69.2	49.7
								79.2	65.9
PAVE									
Paver	2	77	76	290	50	0.66	0.50	72.2	53.7
Compactor (ground)	2	83	76	290	20	0.66	0.20	78.2	55.7
Roller	2	80	76	290	20	0.66	0.20	75.2	52.7
								78.2	62.0
ARCH COAT									
Compressor (air)	1	78	76	290	40	0.66	0.40	73.2	53.7
								73.2	53.7

[1]FHWA Construction Noise Handbook: Table 9.1 RCNM Default Noise Emission Reference Levels and Usage Factors

VIBRATION LEVEL IMPACT

Project:	I-15/Jurupa Valley Storage	Date: 4/21/23
Source:	Large Bulldozer	
Scenario:	Unmitigated	
Location:	Adjacent residences	
Address:	Jurupa Valley	

PPV = PPVref(25/D)^n (in/sec)

DATA INPUT

Equipment = Type	2	Large Bulldozer	INPUT SECTION IN BLUE
PPVref =	0.089	Reference PPV (in/sec) at 25 ft.	
D =	67.00	Distance from Equipment to Receiver (ft)	
n =	1.10	Vibration attenuation rate through the ground	

Note: Based on reference equations from Vibration Guidance Manual, California Department of Transportation, 2006, pgs 38-43.

DATA OUT RESULTS

PPV =	**0.030**	IN/SEC	OUTPUT IN RED

MD ACOUSTICS
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July 17, 2024

MHS 98, LLC
Steve Galvez
20 Paseo Verde
San Clemente, CA 92673

Subject: I-15/Jurupa Valley Storage – Noise Impact Study Addendum #1, City of Jurupa Valley, CA

MD Acoustics, LLC (MD) completed an addendum#1 to the original noise study prepared on 4/26/2023 for the 1-15/Jurupa Valley Storage project located at APN's 152-020-010, 152-060-007, 152-060-009, and 152-060-006 in the City of Jurupa Valley, CA. Since the completion of the noise analysis MD has received concerns about the ambient noise condition during construction approximately 638 feet to the south of the measured ambient noise location.

MD Acoustics has determined that noise levels would not change if the receptor was moved 638 feet to the south as long as the receptor is the same distance from the I-25 freeway (see Exhibit A). Construction activities are expected to go from 8AM to 7PM. Noise levels during construction hours range from 60 dBA to 64 dBA (See Exhibit B).

MD is pleased to provide this addendum #1. If you have any questions regarding this evaluation, please call our office at (602) 774-1950.

Sincerely,
MD Acoustics, LLC

Robert Pearson
Acoustical Consultant

Exhibit A
Ambient Location 638 ft South

Exhibit A

Measurement Locations

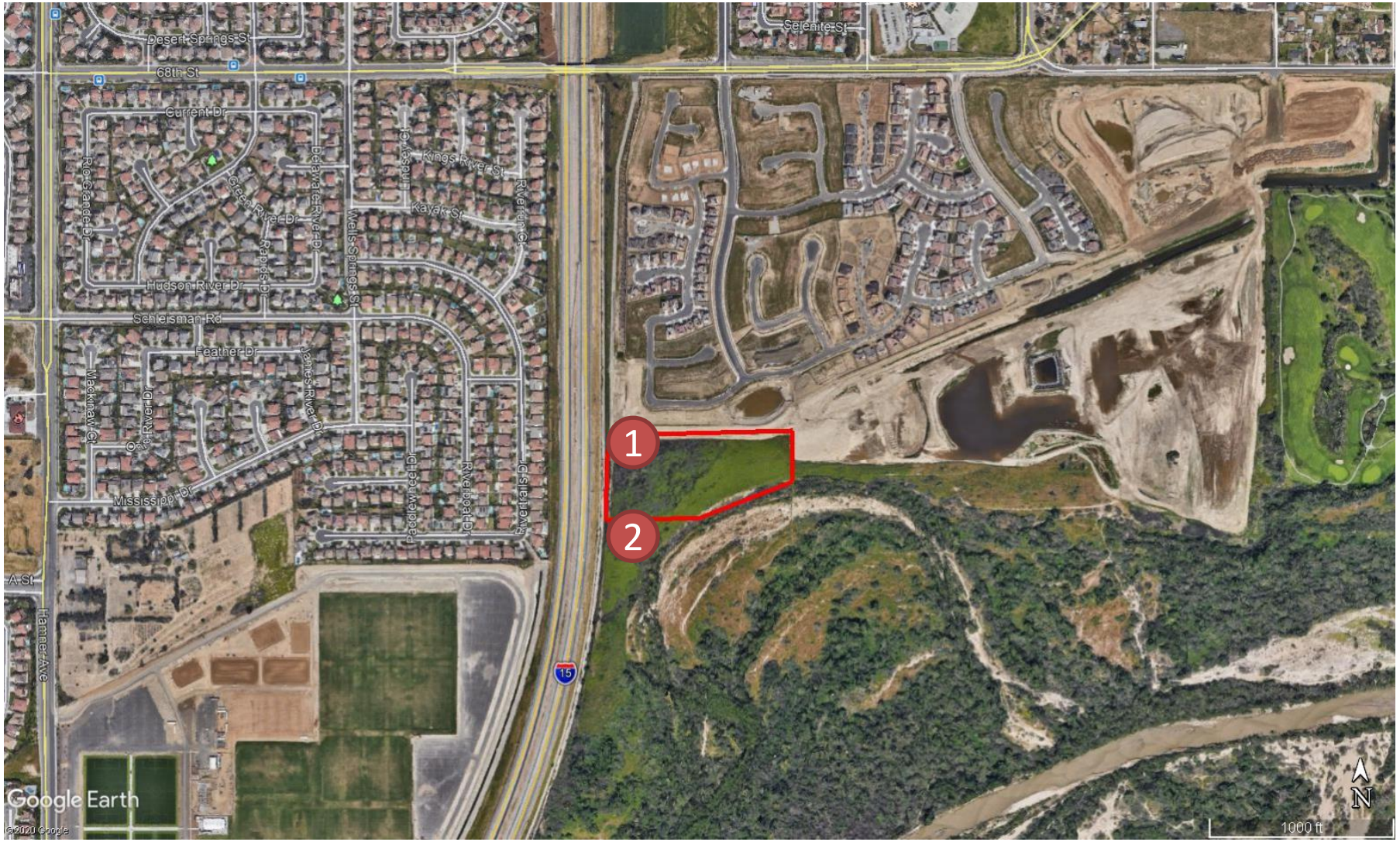

Exhibit B
Field Sheet

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Simi Valley, CA 93065

24-Hour Continuous Noise Measurement Datasheet

Project:	I-15/Jurupa Valley Storage Noise	**Site Observations:**	Clear Sky, Meter at the northwest corner of the site as close to the homes as possible.
Site Address/Location:	East side of 1-15 freeway, Jurupa Valley CA		
Date:	4/21/2023 to 4/22/2022		
Field Tech/Engineer:	Jason Schuyler		

General Location:

Sound Meter:	NTi XL2 **SN:** 80206	**Site Topo:**	Flat
Settings:	A-weighted, slow, 1-min, 24-hour duration	**Ground Type:**	Soft site, Open raw ground with a road
Meteorological Con.:	88 degrees F, 1 to 3 mph wind, west to east diretion		
Site ID:	LT-1		

Noise Source(s) w/ Distance:
C/L of I-15 is 265 feet from meter

Figure 1: LT-1 Monitoring Location

Figure 2: LT-1 Photo

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Simi Valley, CA 93065

24-Hour Noise Measurement Datasheet - Cont.

Project: I-15/Jurupa Valley Storage Noise **Day:** 1 of 1

Site Address/Location: East side of 1-15 freeway, Jurupa Valley CA

Site ID: LT-1

Date	Start	Stop	Leq	Lmax	Lmin	L2	L8	L25	L50	L90
4/21/2023	12:00 AM	1:00 AM	55.0	67.7	50.5	66.4	63.2	60.9	58.9	55.9
4/21/2023	1:00 AM	2:00 AM	52.6	65.3	50.6	66.5	63.3	61.0	59.0	56.0
4/21/2023	2:00 AM	3:00 AM	51.4	64.1	50.8	66.7	63.5	61.2	59.2	56.2
4/21/2023	3:00 AM	4:00 AM	49.6	62.3	52.0	67.9	64.7	62.4	60.4	57.4
4/21/2023	4:00 AM	5:00 AM	50.6	63.3	53.6	69.5	66.3	64.0	62.0	59.0
4/21/2023	5:00 AM	6:00 AM	54.4	67.1	53.2	69.1	65.9	63.6	61.6	58.6
4/21/2023	6:00 AM	7:00 AM	60.8	73.5	51.5	67.4	64.2	61.9	59.9	56.9
4/21/2023	7:00 AM	8:00 AM	63.1	75.8	50.1	66.0	62.8	60.5	58.5	55.5
4/21/2023	8:00 AM	9:00 AM	61.2	73.9	49.0	64.9	61.7	59.4	57.4	54.4
4/21/2023	9:00 AM	10:00 AM	60.2	72.9	48.3	64.2	61.0	58.7	56.7	53.7
4/21/2023	10:00 AM	11:00 AM	60.1	72.8	47.3	63.2	60.0	57.7	55.7	52.7
4/21/2023	11:00 AM	12:00 PM	60.3	73.0	46.7	62.6	59.4	57.1	55.1	52.1
4/21/2023	12:00 PM	1:00 PM	60.4	73.1	45.1	61.0	57.8	55.5	53.5	50.5
4/21/2023	1:00 PM	2:00 PM	60.5	73.2	42.7	58.6	55.4	53.1	51.1	48.1
4/21/2023	2:00 PM	3:00 PM	60.7	73.4	41.5	57.4	54.2	51.9	49.9	46.9
4/21/2023	3:00 PM	4:00 PM	61.9	74.6	39.7	55.6	52.4	50.1	48.1	45.1
4/21/2023	4:00 PM	5:00 PM	63.5	76.2	40.7	56.6	53.4	51.1	49.1	46.1
4/21/2023	5:00 PM	6:00 PM	63.1	75.8	44.5	60.4	57.2	54.9	52.9	49.9
4/21/2023	6:00 PM	7:00 PM	61.4	74.1	50.9	66.8	63.6	61.3	59.3	56.3
4/21/2023	7:00 PM	8:00 PM	60.0	72.7	53.2	69.1	65.9	63.6	61.6	58.6
4/21/2023	8:00 PM	9:00 PM	58.9	71.6	51.3	67.2	64.0	61.7	59.7	56.7
4/21/2023	9:00 PM	10:00 PM	58.2	70.9	50.3	66.2	63.0	60.7	58.7	55.7
4/21/2023	10:00 PM	11:00 PM	57.2	69.9	50.2	66.1	62.9	60.6	58.6	55.6
4/21/2023	11:00 PM	12:00 AM	56.6	69.3	50.4	66.3	63.1	60.8	58.8	55.8

CNEL: 63.8

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24-Hour Continuous Noise Measurement Datasheet - Cont.

Project: I-15/Jurupa Valley Storage Noise **Day:** 1 of 1

Site Address/Location: East side of 1-15 freeway, Jurupa Valley CA

Site ID: LT-1