HYDROGEN FUELING STATION
HESPERIA TRANSFER HUB PROJECTS
Initial Study and Mitigated Negative Declaration (IS/MND)

CEQA Analysis Prepared for:

Victor Valley Transit Authority (VVTA)
17150 Smoke Tree Street
Hesperia, CA 92345
Dustin Strandberg, Chief Maintenance Officer
E: dstrandberg@vvta.org

Prepared by:

UltraSystems Environmental Inc.
16431 Scientific Way
Irvine, CA 92618-4355
Telephone: 949-788-4900
FAX: 949/788-4901

July 2025
Project No. 7315

This page is left intentionally blank.

PROJECT INFORMATION SHEET

1. Project Title	Hydrogen Fueling Station and Transfer Hub
2. CEQA Lead Agency	**Victor Valley Transit Authority** **17150 Smoke Tree St.** **Hesperia, CA 92345** **Dustin Strandberg, Chief Maintenance Officer** **(760) 948-4021** **dstrandberg@vvta.org**
3. Project Applicant	Dustin Strandberg **Victor Valley Transit Authority** 17150 Smoke Tree Street Hesperia, CA 92345
4. Project Location	17150 Smoke Tree St Hesperia, CA 92345
5. Assessor's Parcel Numbers	APN 0410-12-105, APN 041012106, APN 041012107
6. Project Site General Plan Designation(s)	Current: GI - General Industrial
7. Project Site Zoning Designation(s)	Current: GI - General Industrial
8. Surrounding Land Uses and Setting	Neighborhood commercial uses are located to the west of the project site. To the north of the project site is - general manufacturing, to the east of the project site is commercial/industrial business park. The project site is bounded by Main Street to the south.
9. Description of Project	The Hesperia Transfer Hub project would be located on the south side of a 10-acre lot just east of the VVTA Hesperia Facility, located at 17150 Smoke Tree, Hesperia. The Transfer Hub would be constructed on the south three acres of the property (APN: 0410- 12-105). The new Transfer Hub would be designed to enhance the performance and reliability of public fixed routes and respond to the demand for transit services provided by VVTA in San Bernardino County. This new Transfer Hub would replace the current Hub located at the Hesperia Post Office. The Hydrogen Fuel Station project includes one liquid delivered hydrogen fueling station to be

located at the corners of E Avenue and Live Oak Street (APN: 041012106 and 041012107). The fueling station would extend VVTA's current facility on the northwest side to house the hydrogen station equipment. The estimated footprint of the station is 152'w x 98'h.

11. Agencies whose Approval is Required

Victor Valley Transit Agency (VVTA) -Project Funding and Approval

City of Hesperia – Conditional Use Permit

12. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code § 21080.3.1? If so, has consultation begun?

Letters were sent by the VVTA (the Lead Agency), to local Native American tribes asking if they wished to participate in AB 52 consultation concerning the proposed project located in the City of Hesperia. Tribes had up to 30 days in which to respond to notification of the project. For the proposed project, those tribe(s) that requested consultation were contacted by the VVTA per Public Resources Code § 21074. March 28, 2025 – San Manuel Band of Mission Indians responded to the Tribal letter that was sent with a request for a Cultural Report, Geotechnical Report, and project plans showing the depth of proposed disturbance. The Tribe elects to be a consulting party under CEQA. April 17, 2025 – VVTA responded to their request with the information on hand. No additional responses received.

April 15, 2025 – Twenty-Nine Palms Band of Mission Indians responsed to the tribal letter sent to them with a request that VVTA follow specific conditions for all cultural resources on any developmental plans or entitlement packages. It is not their intention to be considered as the consulting party per their letter.

May 21, 2025 – Morongo Band of Mission Indians emailed a letter in response to the tribal letter sent to them on April 21. 2025. Their response indicated tribal participation (aka tribal monitors) is recommended during all ground disturbing activities. The AB 52 consultation process is in progress.

13. Other Public Agencies

Agencies that will review the proposed project include the following:

- Federal Transit Agency (FTA)
- Mohave Desert Air Quality Management District (MDAQMD)
- California Air Resources Board (ARB)
- U.S. Environmental Protection Agency (USEPA)
- Native American Heritage Commission (NAHC)
- California Department of Fish and Wildlife (CDFW)

TABLE OF CONTENTS

1.0 Introduction 1-1
Proposed Project 1-1
1.2 Lead Agencies – Environmental Review Implementation 1-2
1.3 CEQA Overview 1-3
1.4 Purpose of Initial Study 1-4
1.5 Review and Comment by Other Agencies 1-4
1.6 Impact Terminology 1-5
1.7 Organization of Initial Study 1-5
1.8 Findings from the Initial Study 1-6

2.0 Environmental Setting 2-1
2.1 Project Location 2-1
2.2 Project Setting 2-1

3.0 Project Description 3-1
3.1 Project Background 3-1
3.2 Hydrogen Fueling Station 3-3
3.3 Transfer Hub 3-6
3.4 Discretionary Actions 3-16

4.0 Environmental Checklist 4-1
4.1 Aesthetics 4.1-1
4.2 Agriculture and Forestry Resources 4.2-1
4.3 Air Quality 4.3-1
4.4 Biological Resources 4.4-1
4.5 Cultural Resources 4.5-1
4.6 Energy 4.6-1
4.7 Geology and Soils 4.7-1
4.8 Greenhouse Gas Emissions 4.8-1
4.9 Hazards and Hazardous Materials 4.9-1
4.10 Hydrology and Water Quality 4.10-1
4.11 Land Use and Planning 4.11-1
4.12 Mineral Resources 4.12-1
4.13 Noise 4.13-1
4.14 Population and Housing 4.14-1
4.15 Public Services 4.15-1
4.16 Recreation 4.16-1
4.17 Transportation 4.17-1
4.18 Tribal Cultural Resources 4.18-1
4.19 Utilities and Service Systems 4.19-1
4.20 Wildfire 4.20-1
4.21 Mandatory Findings of Significance 4.21-1

5.0 References 5-1

6.0 List of Preparers 6-1
6.1 CEQA Lead Agency 6-1
6.2 Project Applicant 6-1

6.3 UltraSystems Environmental, Inc. 6-1

7.0 Mitigation Monitoring and Reporting Program 7-1

TABLES

Table 2.2-1 - Summary of Existing Land Use and Zoning Designations 2-1
Table 3.3-1 - Construction Equipment and Schedule, Transfer Hub 3-13
Table 3.6-1 - Permits and Approvals 3-16
Table 4.1-1 - Existing Visual Character and Land Uses in the Project Area 4.1-5
Tab le 4.3-1 - Federal and State Attainment Status 4.3-2
Table 4.3-1 - Federal and State Attainment Status 4.3-2
Table 4.3-2 - Ambient Air Quality Monitoring Data 4.3-5
Table 4.3-3 - MDAQMD Thresholds of Significance for Criteria Pollutants 4.3-10
Table 4.3-4 - Construction Schedule 4.3-10
Table 4.3-5 - Maximum Annual Regional Construction Emissions 4.3-11
Table 4.3-6 - Maximum Daily Regional Construction Emissions 4.3-11
Table 4.3-7 - Maximum Annual Project Operational Emissions 4.3-13
Table 4.3-8 - Maximum Daily Project Operational Emissions 4.3-13
Table 4.4-1 – CDFW WJT Standard Mitigation Fees 4.4-11
Table 4.4-2 – WJT Tree Size Class & Mitigation Fee (Hydrogen Fueling Station) 4.4-12
Table 4.4-3 – WJT Tree Size Class & Mitigation Fee (Hesperia Transfer Hub) 4.4-13
Table 4.6-1 - Estimated Project Operational Energy Use 4.6-4
Table 4.7-1 - Fossil Localities in the Project Region 4.7-9
Table 4.8-1 - City of Hesperia Community Business as Usual Emissions 4.8-8
Table 4.8-2 - Project Construction-Related GHG Emissions 4.8-11
Table 4.8-3 - Project Operational GHG Emissions 4.8-13
Table 4.11-1 - Consistency Analysis 4.11-2
Table 4.13-1 - Sensitive Receivers in Project Area 4.13-2
Table 4.13-2 - Ambient Noise Measurement Results 4.13-4
Table 4.13-3 - California Land Use Compatibility for Community Noise Sources 4.13-6
Table 4.13-4 - City of Santa Ana General Plan Interior and Exterior Noise Standards 4.13-8
Table 4.13-5 - Construction Equipment Characteristics 4.13-11
Table 4.13-6 - Noise Analytical Framework 4.13-13
Table 4.13-7 - Estimated One-Hour Construction Noise Exposures at Nearest Offsite Sensitive Receivers 4.13-14
Table 4.13-8 - Vibration Levels of Typical Construction Equipment 4.13-16
Table 4.14-1 - Demographic Forecast, City of Hesperia 4.14-1
Table 4.14-2 - Demographic Estimates, Incorporated Cities in VVTA's Local Service Area 4.14-2
Table 4.19-1 - Hesperia Water District Water Supply Reliability 4.19-4
Table 4.19-2 - Hesperia Water District Water Supply Reliability 4.19-4
Table 4.19-3 - Landfills Serving Fontana 4.19-5
Table 7.0-1 - Mitigation Monitoring and Reporting Program 7-2

FIGURES

Figure 2.2-1 - Regional Location 2-2
Figure 2.2-2 - Project Location 2-3
Figure 2.2-3 - Topographic Map 2-4

Figure 2.2-4 - Project Site Photographs 2-5
Figure 2.2-4 - Project Site Photographs 2-6
Figure 3.1-1 - VVTA System Map 3-2
Figure 3.2-1 - Site Plan, Hydrogen Fueling Station 3-5
Figure 3.2-1 - Site Plan 3-8
Figure 3.3-2 - Renderings, Transfer Hub 3-9
Figure 3.3-3 – Floor Plan, Proposed Building, Transfer Hub 3-10
Figure 3.3-4 – Elevation, Proposed Transfer Hub Building 3-11
Figure 3.3-5 – Rendering, Proposed Transfer Hub Building 3-12
Figure 4.1-1 - State Scenic Highways 4.1-4
Figure 4.1-2 - Views for Surrounding Land Uses in the Project Area 4.1-6
Figure 4.1-3 - Views for Surrounding Lan Uses in the Project Area - Transfer Hub 4.1-7
Figure 4.1-3 - Transfer Hub Conceptual Renderings 4.1-9
Figure 4.1-4 - Transfer Hub Conceptual Renderings 4.1-10
Figure 4.2-1 - Important Farmland Categories 4.2-2
Figure 4.4-1 – Joshua Tree Location Map – Hydrogen Fueling Station 4.4-6
Figure 4.4-2 – Joshua Tree Location Map – Hesperia Transfer Hub (1 of 2) 4.4-8
Figure 4.4-3 – Joshua Tree Location Map – Hesperia Transfer Hub (2 of 2) 4.4-9
Figure 4.5-1 - Topographic Map 4.5-2
Figure 4.7-1 – Alquist Priolo Fault Zones 4.7-3
Figure 4.7-2 – Regionally Active Faults 4.7-4
Figure 4.9-1 – Cortese Act Sites 4.9-6
Figure 4.10-1 - USGS Surface Waters and Watersheds 4.10-3
Figure 4.12-1 - Designated Mineral Resource Zone 4.12-2
Figure 4.12-2 - Oil, Gas and Geothermal Wells 4.12-3
Figure 4.13-1 - Sensitive Receptors Near the Project Site 4.13-3
Figure 4.13-2 - Ambient Noise Measurement Locations 4.13-5

Appendices

Appendix A	Project Plans
Appendix B1	CalEEMod Input and Results For Air Quality Analysis
Appendix B2	CalEEMod Input and Results For Greenhouse Gas Emissions Analysis
Appendix C1	Biological Resources Evaluation
Appendix C2	Arborist Report
Appendix C3	Jurisdictional Delineation
Appendix D1	Cultural Resources Report
Appendix D2	Paleontological Records Search
Appendix E1	Geotechnical Report, Hydrogen Fueling Station
Appendix E2	Geotechnical Report, Transfer Hub
Appendix F1	Methane Report
Appendix F2	Phase I Environmental Site Assessment
Appendix F3	Pesticide Sampling Report
Appendix G	Percolation Test
Appendix H1	Water Quality Management Plan
Appendix H2	Preliminary Hydrology Report
Appendix H3	Sewer Analysis Report
Appendix I	Noise Data
Appendix J	VMT Memo
Appendix K	Information Request Letters
Appendix L	Trip Generation Assessment

ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Term
AAQS	ambient air quality standards
AFY	Acre-feet per year
AIA	Airport Influence Area
AMI	Area Median Income
amsl	above mean sea level
APE	Area of Potential Effect
APN	Assessor's Parcel Number
AQA	Air Quality Analysis
AQMP	Air Quality Management Plan
ARB	California Air Resources Board
BAU	business as usual
bgs	Below ground surface
BIOS	Biogeographic Information and Observation System
BMPs	Best Management Practices
BSA	Biological survey area
BWh	Dry-Hot Desert Climate
BWhh	Dry-Very Hot Desert Climate
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CAL FIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CAO(s)	Cleanup and Abatement Order(s)
CAPCOA	California Air Pollution Control Officers Association
CASGEM	California Statewide Groundwater Elevation Monitoring
CBC	California Building Code
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDO(s)	Cease and Desist Order(s)
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Code
cfs	cubic feet per second
CGS	California Geological Survey
CH_4	methane
CHRIS	California Historic Resources Inventory System
City	City of Hesperia
CMP	Congestion Management Program
CMP	corrugated metal pipe
CMPHS	CMP Highway System
CMU	concrete masonry unit
CNEL	Community Noise Equivalent Level

Acronym/Abbreviation	Term
CNG	compressed natural gas
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CRC	California Residential Code
CWA	Clean Water Act
DAMP	Drainage Area Management Plan
dB	decibel
dBA	A-weighted decibel scale
DLRP	Division of Land Resource Protection
DOC	California Department of Conservation
DOSH	California Division of Safety and Health
DTSC	Department of Toxic Substances Control
du/ac	Dwellling units per acre
DWR	Department of Water Resources
EIR	Environmental Impact Report
EMS	Emergency Medical Services
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act
ESA	Environmental Site Assessment
EV	electric vehicle
EVCS	electric vehicle charging station
°F	degrees Fahrenheit
FAR	floor area ratio
FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zones
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
GHG	greenhouse gases
GIS	Geographic Information System
GPCD	gallons per capita per day
gpd	gallons per day
GSP	groundwater sustainability plan
GSWC	Golden State Water Company
GWP	global warming potential
HABS	Historic American Building Survey
HCP	Habitat Conservation Plan
HFCs	hydroflourocarbons
HFS	Hydroge Fueling Station
HRPD	Hesperia Recreation and Parks District
HSAP	Hydrogen Safety Action Plan
HTH	Hydrogen Transfer Hub
HU	Hydrologic Unit
HVAC	heating, ventiliation and air conditioning

Acronym/Abbreviation	Term
HWD	Hesperia Water District
IPCC	Intergovernmental Panel on Climate Change
ISA	International Society of Arboriculture
IS/MND	Initial Study/Mitigated Negative Declaration
ITE	Institute of Transportation Engineers
L_{90}	noise level that is exceeded 90% of the time
L_{eq}	equivalent noise level
LBP	Lead-Based Paint
LID	Low Impact Development
L_{max}	root mean square maximum noise level
LOS	Level of Service
LRA	Local Responsibility Area
LSTs	Localized Significance Thresholds
LUST	Leaking Underground Storage Tank
MBTA	Migratory Bird Treaty Act
MDAB	Mojave Desert Air Basin
MDAQMD	Mojave Desert Air Quality Management District
mgd	million gallons per day
MLD	Most Likely Descendant
MM(s)	mitigation measure(s)
MMRP	Mitigation Monitoring and Reporting Program
$MMTCO_2e$	million metric tons of CO2e
MND	Mitigated Negative Declaration
MOU	Memorandum of Understanding
MPAH	Master Plan of Arterial Highways
MRGWB	Mojave River Groundwater Basin
MRZ	Mineral Resource Zone
MS4	Municiple Separate Storm Sewer permit
MT	Metric tons
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
National Core	National Community Renaissance
NCCP	Natural Communities Conservation Plan
ND	Negative Declaration
NO	nitric oxide
NO_x	nitrogen oxides
NO_2	nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
O_3	Ozone
OPR	Governor's Office of Planning and Research
OSHA	Occupational Safety and Health Administration
Pb	lead
PCB	polychlorinated biphenyl
PFCs	perfluorocarbons
PM	particulate matter

Acronym/Abbreviation	Term
PM_{10}	respirable particulate matter
$PM_{2.5}$	fine particulate matter
ppm	parts per million
PPV	peak particle velocity
R-1	Single-family Residential zoning designation
R-3	High Density Residential zoning designation
RCRA	Resource Conservation and Recovery Act
RECs	Recognized Environmental Condition(s)
R-G	Medium Density Residential zoning designation
RHNA	Regional Housing Needs Allocation
RMS	root mean square
ROG	Reactive organic gases
ROW	Right-of-way
RPS	Renewables Portfolio Standard
RWQCB	Regional Water Quality Control Board
§	section
SB	Senate Bill
SBCFPD	San Bernardino County Fire Protection District
SBCL	San Bernardino County Library
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison Company
SF_6	sulfur hexafluoride
SIP	State Implementation Plan
SLF	Sacred Lands File
SMARA	Surface Mining and Reclamation Act
SO_2	sulfur dioxide
SoCalGas	Southern California Gas Company
SRA	State Responsibility Area
SRAs	source receptor areas
SRRE	Source Reduction and Recycling Element
STIP	Statewide Transportation Improvement Program
SUSMP	Standard Urban Stormwater Mitigation Plan
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAPs	Transportation Assembly Points
T-C	Town Center zoning designation
TCRs	Tribal Cultural Resources
TMP	Traffic Management Plan
UFPO	Urban Forest Protection Ordinance
UEI	Ultrasystems Environmental, Inc.
U.S.	United States
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency

Acronym/Abbreviation	Term
VdB	vibration decibels
VCP	vitrified clay pipe
VHFHSZ(s)	very high fire hazard severity zone(s)
VVTA	Victor Valley Transit Authority
VMT	vehicle miles traveled
VOC	volatile organic compound
WEG	wind erodibility group
WJT	Western Joshua Tree
WJTCA	WJT Conservation Act
WQMP	Water Quality Management Plan
WRI	World Resources Institute
ybp	years before present

1.0 INTRODUCTION

Proposed Project

The Victor Valley Transit Authority (VVTA) is seeking approval from the Victor Valley Transit Authority Board of Directors and the City of Hesperia for development of two projects, each abutting VVTA's existing bus operations and maintenance facility at 17150 Smoke Tree Street in the central part of the City of Hesperia. The existing operations and maintenance facility encompasses approximately 9.5 acres at the northeast corner of E Avenue and Smoke Tree Street.

1.1.1 Project Components

The proposed project would consist of two components, a hydrogen fueling station and a transfer hub:

Hydrogen Fueling Station

The hydrogen fueling station (HFS) would include the following components:

Hydrogen Equipment Area

- 18,000-gallon Cryogenic Tank with Liquid Fill Port
- Three hydrogen pumps
- Pump Control Panel
- Hydrogen Buffer Vessels
- Vaporizers
- Vent Stacks
- Valve Panel
- Gaseous HP Hydrogen Compressor
- Air Compressors
- Electrical Switchgear
- Compressed Natural Gas Backup Generator
- Gaseous Compressor Chiller
- Hydrogen Dispensers for VVTA Buses (on existing fueling island)
- Hydrogen Dispenser for Public Use (southwest of existing fueling island, next to east side of E Street)
- Dispenser chiller for Public Dispenser (next to dispenser)

An 18-foot-high concrete masonry unit (CMU) wall would be built surrounding the west, north, and east sides of the proposed HFS.

Transfer Hub

The transfer hub would include:

- 10 sawtooth bus bays with a platform between the two rows of bus bays for waiting passengers
- Benches
- Shade structure

- One 1,777-square foot, one-story building with:
  - Lobby
  - Driver breakroom
  - Office
  - Security office
  - Two public gendered restrooms (two stalls each)
  - Two private all-gender restrooms
  - A ticketing office
  - Janitorial and electrical rooms

1.1.2 Estimated Construction Schedule

Hydrogen Fueling Station

Construction of the fueling station is scheduled for seven months, from November 2025 to May 2026. The schedule of construction by phase (site preparation, grading, utilities installation, etc.) has not been determined. Default values from the CalEEMod software used in air quality modeling will be used for construction schedule and construction equipment (types and numbers per type) in air quality and noise modeling. Construction would occur during daylight hours; no nighttime construction is planned. Temporary fencing will be installed along the construction site perimeter, to be replaced by the proposed CMU wall before project completion.

Estimated construction employment is between five and 20 workers, depending on construction phase. All construction parking and staging would be conducted onsite and/or within the existing maintenance facility.

Transfer Hub

Construction of the transfer hub is scheduled for 11 months, from October 2025 to August 2026. The construction schedule by phase, with construction equipment, is shown below in **Table 3.3-1** in Section 3.0, *Project Description*. All construction, parking and staging would be conducted onsite.

For safety reasons, temporary barricades would be used to limit access to the site during project construction and to maintain safe access for construction workers. Construction would occur in daylight during regular business hours. Lighting for the construction site would be limited to the minimum amount of light needed for safety and security.

Grading of the transfer hub site would involve export of about 3,010 cubic yards (cy) of soil that would be stored indefinitely just north of the project site. The transfer hub project includes about 103,907 square feet of impervious surfaces; that entire area is currently pervious.

1.2 Lead Agencies – Environmental Review Implementation

The Victor Valley Transit Authority is the Lead Agency for the proposed project. Pursuant to the California Environmental Quality Act (CEQA) and its implementing regulations,[1] the Lead Agency has the principal responsibility for implementing and approving a project that may have a significant effect on the environment.

1 Public Resources Code §§ 21000 - 21177 and California Code of Regulations Title 14, Division 6, Chapter 3.

1.3 CEQA Overview

1.3.1 Purpose of CEQA

All discretionary projects within California are required to undergo environmental review under CEQA. A Project is defined in CEQA Guidelines § 15378 as the whole of the action having the potential to result in a direct physical change or a reasonably foreseeable indirect change to the environment and is any of the following:

- An activity directly undertaken by any public agency including but not limited to public works construction and related activities, clearing or grading of land, improvements to existing public structures, enactment and amendment of zoning ordinances, and the adoption and amendment of local General Plans or elements.

- An activity undertaken by a person which is supported in whole or in part through public agency contracts, grants, subsidies, loans, or other forms of assistance from one or more public agencies.

- An activity involving the issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies.

CEQA Guidelines § 15002 lists the basic purposes of CEQA as follows:

- Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities.

- Identify the ways that environmental damage can be avoided or significantly reduced.

- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures (MMs) when the governmental agency finds the changes to be feasible.

- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

1.3.2 Authority to Mitigate under CEQA

CEQA establishes a duty for public agencies to avoid or minimize environmental damage where feasible. Under CEQA Guidelines § 15041 a Lead Agency for a project has authority to require feasible changes in any or all activities involved in the project in order to substantially lessen or avoid significant effects on the environment, consistent with applicable constitutional requirements such as the "nexus"[2] and "rough proportionality"[3] standards.

CEQA allows a Lead Agency to approve a project even though the project would cause a significant effect on the environment if the agency makes a fully informed and publicly disclosed decision that there is no feasible way to lessen or avoid the significant effect. In such cases, the Lead Agency must

2 A nexus (i.e., connection) must be established between the mitigation measure and a legitimate governmental interest.
3 The mitigation measure must be "roughly proportional" to the impacts of the Project.

specifically identify expected benefits and other overriding considerations from the project that outweigh the policy of reducing or avoiding significant environmental impacts of the project.

1.4 Purpose of Initial Study

The CEQA process begins with a public agency making a determination as to whether the project is subject to CEQA at all. If the project is exempt, the process does not need to proceed any farther. If the project is not exempt, the Lead Agency takes the second step and conducts an Initial Study to determine whether the project may have a significant effect on the environment.

The purposes of an Initial Study as listed in § 15063(c) of the CEQA Guidelines are to:

- Provide the Lead Agency with information necessary to decide if an Environmental Impact Report (EIR), Negative Declaration (ND), or Mitigated Negative Declaration (MND) should be prepared.
- Enable a Lead Agency to modify a project to mitigate adverse impacts before an EIR is prepared, thereby enabling the project to qualify for a ND or MND.
- Assist in the preparation of an EIR, if required, by focusing the EIR on adverse effects determined to be significant, identifying the adverse effects determined not to be significant, explaining the reasons for determining that potentially significant adverse effects would not be significant, and identifying whether a program EIR, or other process, can be used to analyze adverse environmental effects of the project.
- Facilitate an environmental assessment early during project design.
- Provide documentation in the ND or MND that a project would not have a significant effect on the environment.
- Eliminate unnecessary EIRs.
- Determine if a previously prepared EIR could be used for the Project.

In cases where no potentially significant impacts are identified, the Lead Agency may issue an ND, and no MMs would be needed. Where potentially significant impacts are identified, the Lead Agency may determine that MMs would adequately reduce these impacts to less than significant levels. The Lead Agency would then prepare an MND for the proposed project. If the Lead Agency determines that individual or cumulative effects of the proposed project would cause a significant adverse environmental effect that cannot be mitigated to less than significant levels, then the Lead Agency would require an EIR to further analyze these impacts.

1.5 Review and Comment by Other Agencies

Other public agencies are provided with the opportunity to review and comment on the IS/MND. Each of these agencies is described briefly below.

- A Responsible Agency (14 CCR § 15381) is a public agency, other than the Lead Agency, that has discretionary approval power over the Project, such as permit issuance or plan approval authority.

- A Trustee Agency[4] (14 CCR § 15386) is a state agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people of the State of California.

- Agencies with Jurisdiction by Law (14 CCR § 15366) are any public agencies who have authority (1) to grant a permit or other entitlement for use; (2) to provide funding for the project in question; or (3) to exercise authority over resources which may be affected by the project. Furthermore, a city or county will have jurisdiction by law with respect to a project when the city or county having primary jurisdiction over the area involved is: (1) the site of the project; (2) the area in which the major environmental effects will occur; and/or (3) the area in which reside those citizens most directly concerned by any such environmental effects.

1.6 Impact Terminology

The following terminology is used to describe the level of significance of potential impacts:

- A finding of ***no impact*** is appropriate if the analysis concludes that the project would not affect the particular environmental threshold in any way.

- An impact is considered ***less than significant*** if the analysis concludes that the project would cause no substantial adverse change to the environment and requires no mitigation.

- An impact is considered ***less than significant with mitigation incorporated*** if the analysis concludes that the project would cause no substantial adverse change to the environment with the inclusion of environmental commitments, or other enforceable measures, that would be adopted by the lead agency.

- An impact is considered potentially significant if the analysis concludes that the project could have a substantial adverse effect on the environment.

An EIR is required if an impact is identified as ***potentially significant***.

1.7 Organization of Initial Study

This document is organized to satisfy CEQA Guidelines § 15063(d), and includes the following sections:

- **Section 1.0 - Introduction**, which identifies the purpose and scope of the IS/MND.

- **Section 2.0 - Environmental Setting**, which describes location, existing site conditions, land uses, zoning designations, topography, and vegetation associated with the project site and surroundings.

- **Section 3.0 - Project Description**, which provides an overview of the project, a description of the proposed development, project phasing during construction, and discretionary actions for project approval.

4 The four Trustee Agencies in California listed in CEQA Guidelines § 15386 are California Department of Fish and Wildlife, State Lands Commission, State Department of Parks and Recreation, and University of California.

- **Section 4.0 - Environmental Checklist**, which presents checklist responses for each resource topic to identify and assess impacts associated with the proposed project, and proposes MMs, as needed, to reduce potential environmental impacts to less than significant.

- **Section 5.0 - References**, which includes a list of documents cited in the IS/MND.

- **Section 6.0 - List of Preparers**, which identifies the primary authors and technical experts that prepared the IS/MND.

Technical studies and other documents, which include supporting information or analyses used to prepare the IS/MND, are included in the following appendices:

- Appendix A Project Plans
- Appendix B1 CalEEMod Input and Results for Air Quality Analysis
- Appendix B2 CalEEMod Input and Results for Greenhouse Gas Emissions Analysis
- Appendix C1 Biological Resources Evaluation
- Appendix C2 Arborist Report
- Appendix C3 Jurisdictional Delineation
- Appendix D1 Cultural Resources Report
- Appendix D2 Paleontological Records Search
- Appendix E1 Geotechnical Report, Hydrogen Fueling Station
- Appendix E2 Geotechnical Report, Transfer Hub
- Appendix F1 Methane Report
- Appendix F2 Phase I Environmental Site Assessment
- Appendix F3 Pesticide Sampling Report
- Appendix G Percolation Test
- Appendix H1 Water Quality Management Plan
- Appendix H2 Preliminary Hydrology Report
- Appendix H3 Sewer Analysis Report
- Appendix I Noise Data
- Appendix J VMT Memo
- Appendix K Information Request Letters
- Appendix L Trip Generation Assessment

1.8 Findings from the Initial Study

1.8.1 No Impact or Impacts Considered Less than Significant

Based on IS findings, the project would have no impact or a less than significant impact on the following environmental categories listed from Appendix G of the CEQA Guidelines.

- Agriculture and Forestry Resources
- Air Quality
- Aesthetics
- Energy
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials

- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic
- Utilities and Service Systems
- Wildfire

1.8.2 Impacts Considered Less than Significant with Mitigation Measures

Based on IS findings, the project would have a less than significant impact on the following environmental categories listed in Appendix G of the CEQA Guidelines when proposed Mitigation Measures are implemented.

- Biological Resources
- Cultural Resources
- Geology and Soils
- Tribal Cultural Resources
- Mandatory Findings of Significance

2.0 ENVIRONMENTAL SETTING

2.1 Project Location

The Hydrogen Fueling Station and Hesperia Transfer Hub Projects are situated adjacent to VVTA's existing bus operations and maintenance facility in the central area of Hesperia (see **Figure 2.2-1)**. The operations and maintenance facility occupies approximately 9.5 acres at the northeast corner of E Avenue and Smoke Tree Street, with an address of 17150 Smoke Tree Street, Hesperia, CA. The site is bordered by Live Oak Street to the north, E Avenue to the west, and Smoke Tree Street to the south.

2.2 Project Setting

The proposed hydrogen fueling station would be built on a portion of the parcel (APN 041012106) abutting the north side of the operations and maintenance facility. The proposed transfer hub would be built on the south side of a 10-acre lot to the immediate east of the existing operations and maintenance facility. Specifically, it would be constructed on the south three acres of the property (APN: 041012105). **Figure 2.2-2** depicts the location of each of the project sites.

Topography within the project site is relatively flat. See **Figure 2.2-3** (Topographic Map), which depicts the topography of the site, and surrounding area. Site photographs are provided in **Figure 2.2-4 and Figure 2.2-5** And illustrate the current conditions of the site.

2.2.1 Land Use and Zoning

The land use, zoning, and specific plan designations of the project site and its immediate vicinity are listed in **Table 2.2-1**. The project site has a General Plan land use and Zoning designation of General Industrial (GI) (City of Hesperia, 2023a).

Table 2.2-1
SUMMARY OF EXISTING LAND USE, ZONING AND SPECIFIC PLAN DESIGNATIONS

Location	General Plan Designation	Zoning Designation	Existing Development
Project Site	General Industrial (GI)	General Industrial (GI)	Vacant land
North	General Industrial (GI)	General Industrial (GI)	Vacant land, Storage, Single-family home
South	General Industrial (GI)	General Industrial (GI), Commercial/Industrial Business Park (CIMP)	CNG Gas Station, Victor Valley Transit Authority
East	General Industrial (GI)	General Industrial (GI)	Vacant land
West	General Industrial (GI)	General Industrial (GI)	Storage units

Source: City of Hesperia, 2023a; Google Earth Pro, 2025

Figure 2.2-1
REGIONAL LOCATION

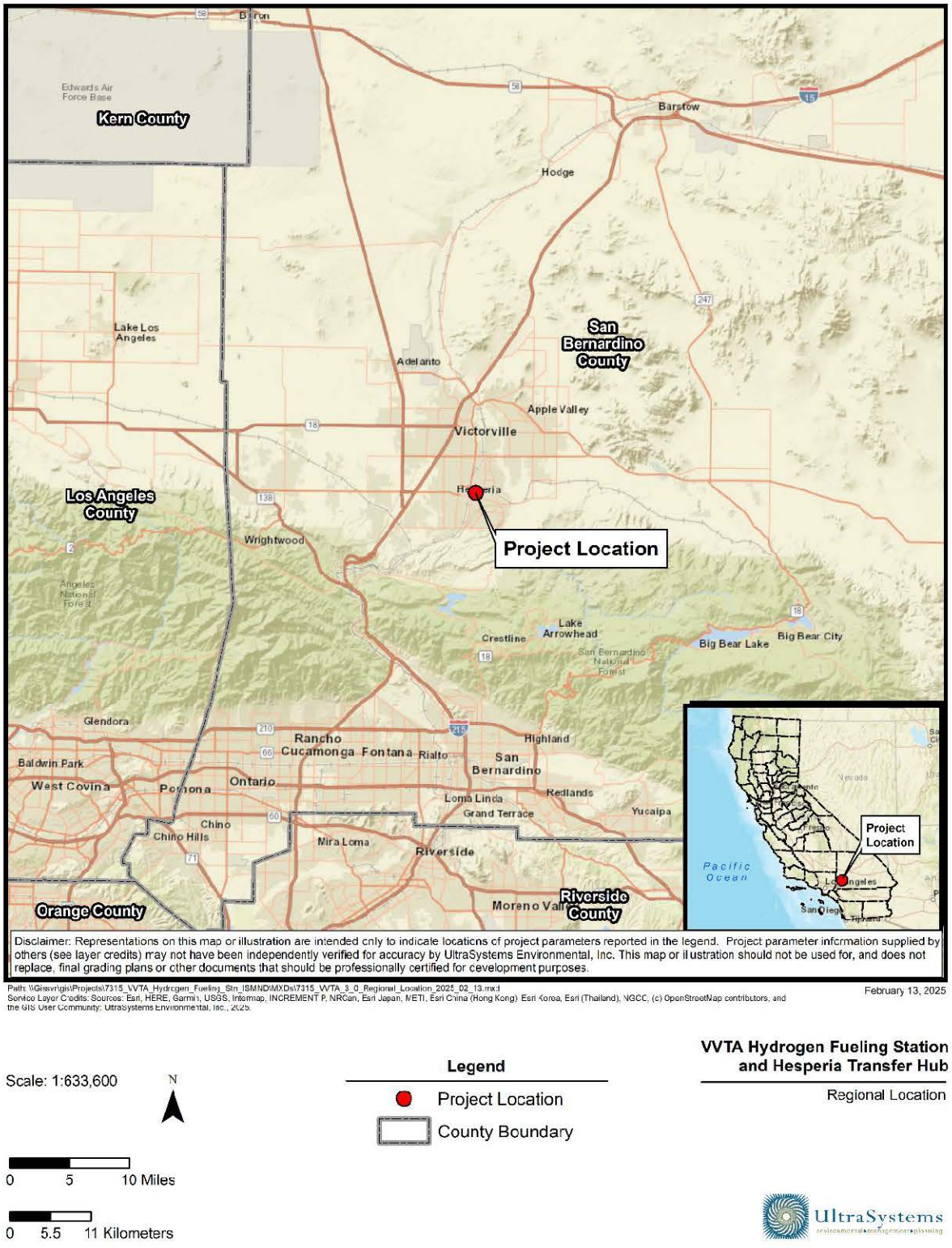


Figure 2.2-2
PROJECT LOCATION

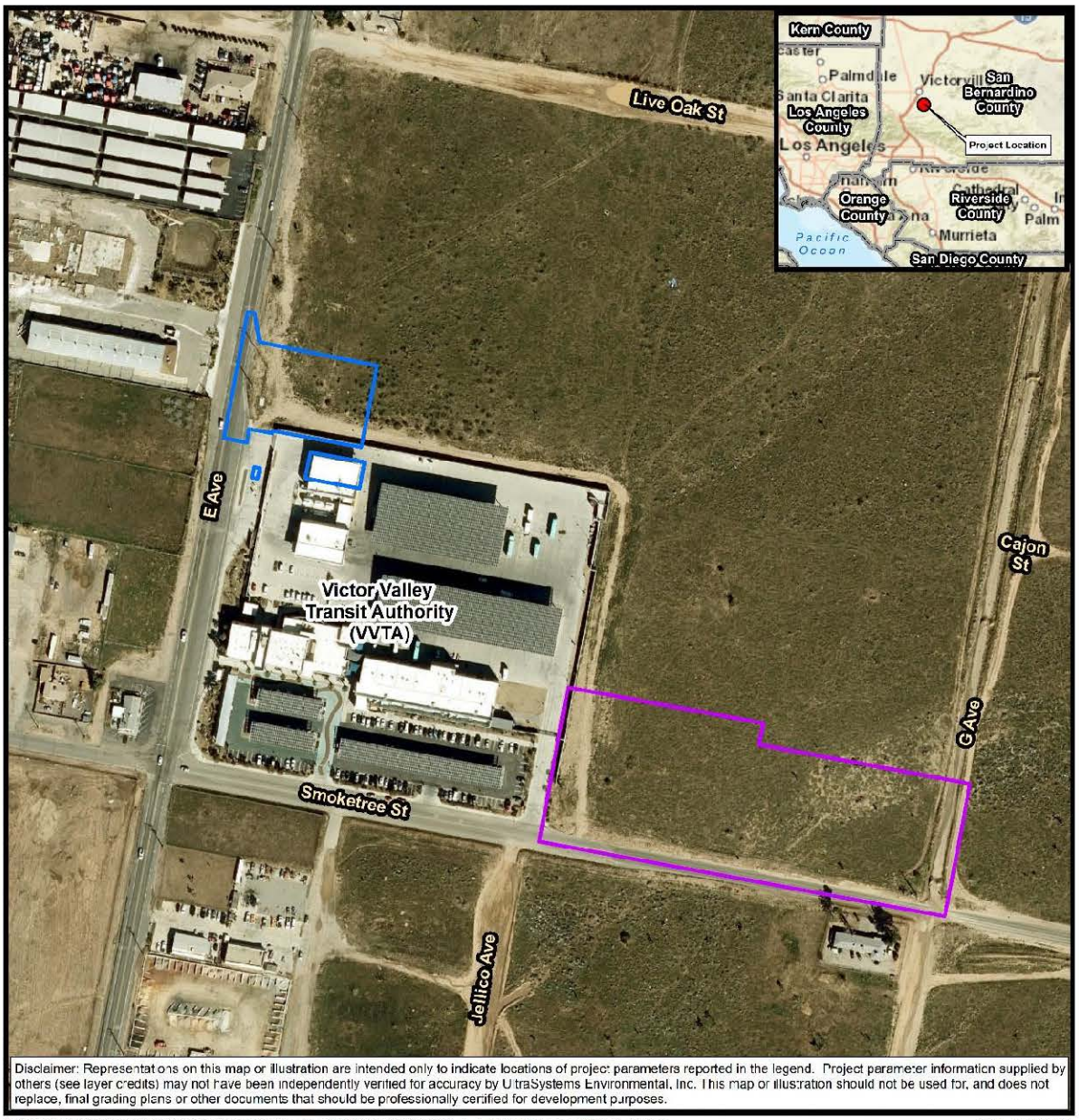


Figure 2.2-3
TOPOGRAPHIC MAP

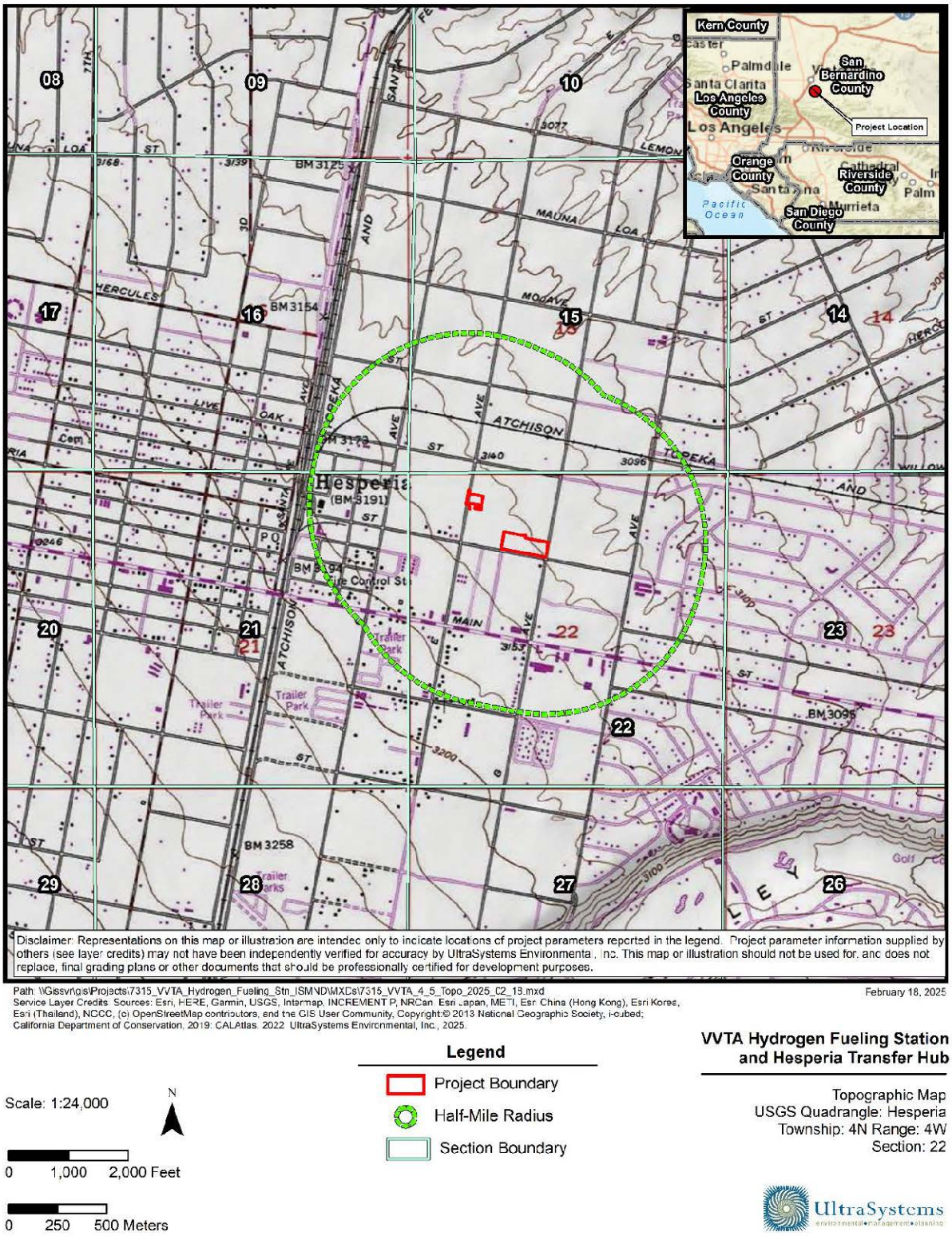


Figure 2.2-4
PROJECT SITE PHOTOGRAPHS – HESPERIA FUELING STATION

Photo 1: North-facing view from E Ave, west of the project site.

Photo 1: East-facing view of the project site from E Ave.

Photo 3: South-facing view of the project site from E Ave, west of the project site.

Photo 4: West-facing view from E Ave, west of the project site.

Figure 2.2-5
PROJECT SITE PHOTOGRAPHS – HESPERIA TRANSFER HUB

Photo 1: North-facing view of the project site from Smoke Tree St.

Photo 1: West-facing view of the project site from Smoke Tree St, south of project site.

Photo 3: South-facing view of the project site from Smoke Tree St.

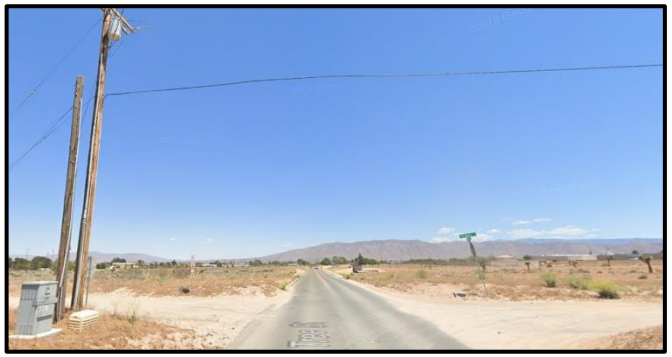


Photo 4: East-facing view from the southeast corner of the project site (Intersection of Smoke Tree St. and G Ave).

2.2.2 Existing Characteristics of the Site

2.2.2.1 Climate and Air Quality

The project site is located in the southwestern portion of San Bernardino County within the Mojave Desert Air Basin (MDAB). The Mojave Desert Air Quality Management District (MDAQMD) has primary responsibility for regulating air quality and implementing air pollution control strategies in this region.

The MDAB is characterized by an arid climate and is classified as a dry-hot desert, with some areas further categorized as dry-very hot desert, indicating that average maximum temperatures exceed 100.4 degrees Fahrenheit for at least three months annually.

A description of the pollutants of concern and their associated health effects is provided in **Section 4.3** of this Initial Study.

2.2.2.2 Geology and Soils

The area is part of the Mojave Block of the broader Southern California geomorphic province and is characterized by arid, alluvial plains, gentle slopes, and scattered bedrock outcrops. The geologic materials underlying the project site generally consist of unconsolidated Quaternary alluvium, composed primarily of sand, silt, and gravel deposited by intermittent surface flows and wind action (DOC, 2025).

Soils in the project area are mapped as part of the Cajon sand, two to nine percent slopes and Arizo coarse sandy loam series, both of which are typical of desert valley settings. These soils are well-drained, have low shrink-swell potential, and generally pose a low risk for erosion under undisturbed conditions (USDA, 2015). However, grading and earthwork associated with project development could temporarily increase erosion potential if appropriate control measures are not implemented.

The project site is not located within a State of California-designated Alquist-Priolo Earthquake Fault Zone, and no active or potentially active faults are known to traverse the site. However, the region is seismically active, and strong ground shaking is expected during the life of the project due to the presence of regional faults such as the San Andreas, San Jacinto, and Helendale faults.

Additionally, the site is not identified as having a high risk of liquefaction or landslide hazards based on review of available geologic and hazard mapping. Site-specific geotechnical investigations would be required to confirm soil stability, bearing capacity, and to develop appropriate design and construction recommendations in accordance with the California Building Code (CBC) and City of Hesperia development standards.

Geology and soils impacts are discussed in further detail in **Section 4.7** of this Initial Study.

2.2.2.3 Hydrology

The project site lies within the Mojave River Watershed, part of the South Lahontan Hydrologic Region as defined by the California Department of Water Resources. The project area is located in a predominantly arid desert environment and does not contain any blue-line streams, natural watercourses, wetlands, or other jurisdictional waters as identified by the U.S. Geological Survey (USGS) or the National Wetlands Inventory (NWI). The nearest major hydrologic feature is the Mojave River, located approximately five miles northeast of the site.

Surface drainage on the project site is currently managed as sheet flow, directed toward existing street gutters and storm drain systems along Smoke Tree Street and E Avenue. There is no on-site stormwater detention or infiltration system currently in place. Soils are generally well-drained, with low permeability and limited capacity for groundwater recharge. The project area does not overlie a mapped groundwater basin that is considered a significant source of municipal water supply.

The site is not located within a 100-year flood hazard area, as mapped by the Federal Emergency Management Agency (FEMA); it lies within Zone X, indicating minimal flood risk (FEMA Flood Insurance Rate Map Panel No. 06071C6665H, effective August 28, 2008). There are no identified floodways or flood control channels on or adjacent to the site.

Stormwater discharges from the site are subject to regulation under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009-DWQ, NPDES No. CAS000002). Compliance with the permit would require preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) and adoption of best management practices (BMPs) to control erosion, sedimentation, and pollutant discharges during construction.

Post-development hydrology would be addressed through the incorporation of on-site drainage improvements, including curbs, gutters, storm drain connections, and an infiltration basin at the transfer hub site.

Hydrology is analyzed in detail in **Section 4.7** of this Initial Study.

2.2.2.4 Biology

The project site is located within the City of Hesperia, adjacent to the existing Victor Valley Transit Authority (VVTA) operations and maintenance facility. The project site is surrounded by existing urban development, including a VVTA (Victor Valley Transit Authority) facility and a major roadway with adjacent residential neighborhoods to the south. While the lands immediately to the north and east remain open and undeveloped, they transition into industrial uses further beyond, indicating a broader urbanized context. The site consists primarily of previously graded and vacant land with sparse vegetation, compacted soils, and existing infrastructure. No natural riparian features, drainages, wetlands, or aquatic habitats occur on-site. The site is not located within or adjacent to a designated habitat conservation plan (HCP), Natural Community Conservation Plan (NCCP), or any other locally designated biological resource area.

Biological surveys identified that the majority of the project area does not provide suitable habitat for special-status plant or wildlife species due to prior disturbance, lack of native vegetation, and urban encroachment. However, the transfer hub portion of the site supports a small population of Joshua trees (Yucca brevifolia)—a candidate species under the California Endangered Species Act (CESA). A total of 30 Joshua trees were documented on-site, of which 19 are alive and may require removal or relocation to facilitate development. Potential impacts to Joshua trees are addressed in **Section 4.4** (Biological Resources), including regulatory compliance with the California Department of Fish and Wildlife (CDFW) and acquisition of an Incidental Take Permit, if necessary.

The project site does not support any designated critical habitat for federally listed species, and no occurrences of listed wildlife species (e.g., burrowing owl, desert tortoise) were observed during field surveys. Due to the presence of marginal ornamental vegetation and structures, there is potential for nesting by migratory birds protected under the Migratory Bird Treaty Act (MBTA) and California Fish

and Game Code. To avoid take during the nesting season (typically February 1 through September 15), pre-construction surveys and appropriate buffer zones would be implemented, as detailed in the project's mitigation measures.

The project site is not located within a Multiple Species Habitat Conservation Plan (MSHCP) or Biological Resource Core Area (BRCA), and it does not serve as a wildlife movement corridor or nursery site. The surrounding area is built out with industrial and transportation infrastructure, further reducing the biological sensitivity of the site.

Refer to **Section 4.4** of this Initial Study for a full analysis of Biological Resources for the project.

2.2.2.5 Public Services

The project site is located within the City of Hesperia and is currently served by existing public service providers responsible for fire protection, law enforcement, emergency response, and municipal infrastructure.

Fire protection services are provided by the San Bernardino County Fire Protection District (SBCFPD), which operates multiple fire stations in the region. The nearest fire station is Fire Station 302, located approximately 1.4 miles southeast of the project site at 17288 Olive Street. The SBCFPD is responsible for enforcing the California Fire Code and providing emergency medical services, fire suppression, and hazardous materials response.

Law enforcement services are provided by the San Bernardino County Sheriff's Department, operating under contract with the City of Hesperia. The Hesperia Sheriff's Station, located at 15840 Smoke Tree Street, is situated less than one mile from the project site and serves as the local headquarters for patrol and response services.

Emergency medical services (EMS) in the region are provided by SBCFPD and private ambulance providers operating under contract with the County's EMS system. Response times in the area are governed by County protocols and mutual aid agreements.

Water and wastewater services are provided by the Hesperia Water District, a division of the City of Hesperia. The site is served by existing water and sewer infrastructure within Smoke Tree Street and E Avenue. Modifications and extensions of utility lines will be required to serve the proposed hydrogen fueling station and transfer hub.

As reviewed in **Section 4.15** of this Initial Study, the proposed project would not induce substantial population growth or create unplanned demand on public services. All services are currently available in the area, and the project would be served by existing service providers with no need for new or expanded public facilities.

2.2.2.6 Utilities

The project site is located within the City of Hesperia and is currently served by existing utility infrastructure. Utilities in the area include domestic water, wastewater collection, storm drainage, electricity, natural gas, solid waste disposal, and telecommunications services.

- Water Supply: Potable water is provided by the Hesperia Water District, a division of the City of Hesperia. The site is located adjacent to existing water mains within Smoke Tree Street and

E Avenue. Adequate water supply is available to serve the proposed hydrogen fueling station and transfer hub, including restroom and landscape irrigation demands.

- Wastewater: Wastewater collection and conveyance are also provided by the Hesperia Water District. Existing sewer lines are located in adjacent public roadways. Wastewater generated by the project would be typical of commercial uses and would not require any specialized treatment, outside of the normal septic systems.

- Stormwater Drainage: The project area currently drains via sheet flow to Smoke Tree Street and E Avenue. Existing storm drain infrastructure is present along these roadways. The proposed transfer hub includes installation of a 10,000-cubic-foot infiltration basin in the southeast portion of the site to manage and treat on-site stormwater runoff in compliance with San Bernardino County stormwater management requirements and NPDES regulations.

- Electricity: Electrical service is provided by Southern California Edison (SCE). The existing VVTA operations and maintenance facility is connected to the electrical grid. Electrical upgrades, including switchgear and transformers, will be installed as part of the hydrogen fueling station improvements.

- Natural Gas: Southwest Gas provides natural gas service to the area. A compressed natural gas (CNG) backup generator will be installed for the hydrogen fueling station, consistent with existing energy infrastructure.

- Solid Waste: Advance Disposal, operating under franchise agreement with the City, provides solid waste and recycling collection services. The proposed project would generate solid waste similar to other transportation-related and administrative uses and would be accommodated by existing disposal services and regional landfill capacity.

- Telecommunications: Telecommunication services, including voice and internet, are available from multiple private providers with infrastructure in place along surrounding roadways.

All utility connections would be extended or upgraded as needed to accommodate project demands. The project would not require the construction of new off-site utility infrastructure or expansion of existing utility systems beyond what is already planned or permitted.

Utilities and Service Systems are fully reviewed in **Section 4.19** of this Initial Study.

3.0 PROJECT DESCRIPTION

3.1 Project Background

The Victor Valley Transit Authority (VVTA) is seeking approval from the Victor Valley Transit Authority Board of Directors and the City of Hesperia for development of two projects each abutting VVTA's existing bus operations and maintenance facility at 17150 Smoke Tree Street in the central part of the City of Hesperia. The existing operations and maintenance facility encompasses approximately 9.5 acres at the northeast corner of E Avenue and Smoke Tree Street.

3.1.1 Hydrogen Fueling Station

The proposed hydrogen fueling station would be built on two parcels, APNs 041012106 and 041012107, abutting the north side of the operations and maintenance facility, using only approximately 18,000 square feet total of the two parcels. The fueling station would have the capability to serve up to 60 buses daily and serve up to 20 cars daily. The fueling station is part of VVTA's plan to convert its bus fleet to 100-percent zero-emission by 2040, including conversion of its entire fleet of full-size buses to hydrogen-fueled vehicles by 2035.

3.1.2 Hesperia Transfer Hub

The proposed Hesperia Transfer Hub would be a station for passengers transferring between VVTA routes; the transfer hub would include 10 sawtooth bus bays; a building to include restrooms and a security office; and a shade canopy. The transfer hub would be built on a 10-acre parcel, part of APN 041012105, next to the east side of the operations and maintenance facility, using only 3.06-acres of the parcel. The proposed hub would replace an existing transfer point at the intersection of G Avenue and Olive Street, next to a post office, about 0.5 mile south of the hub site; and would provide improved safety, comfort, and convenience compared to the existing transfer point.

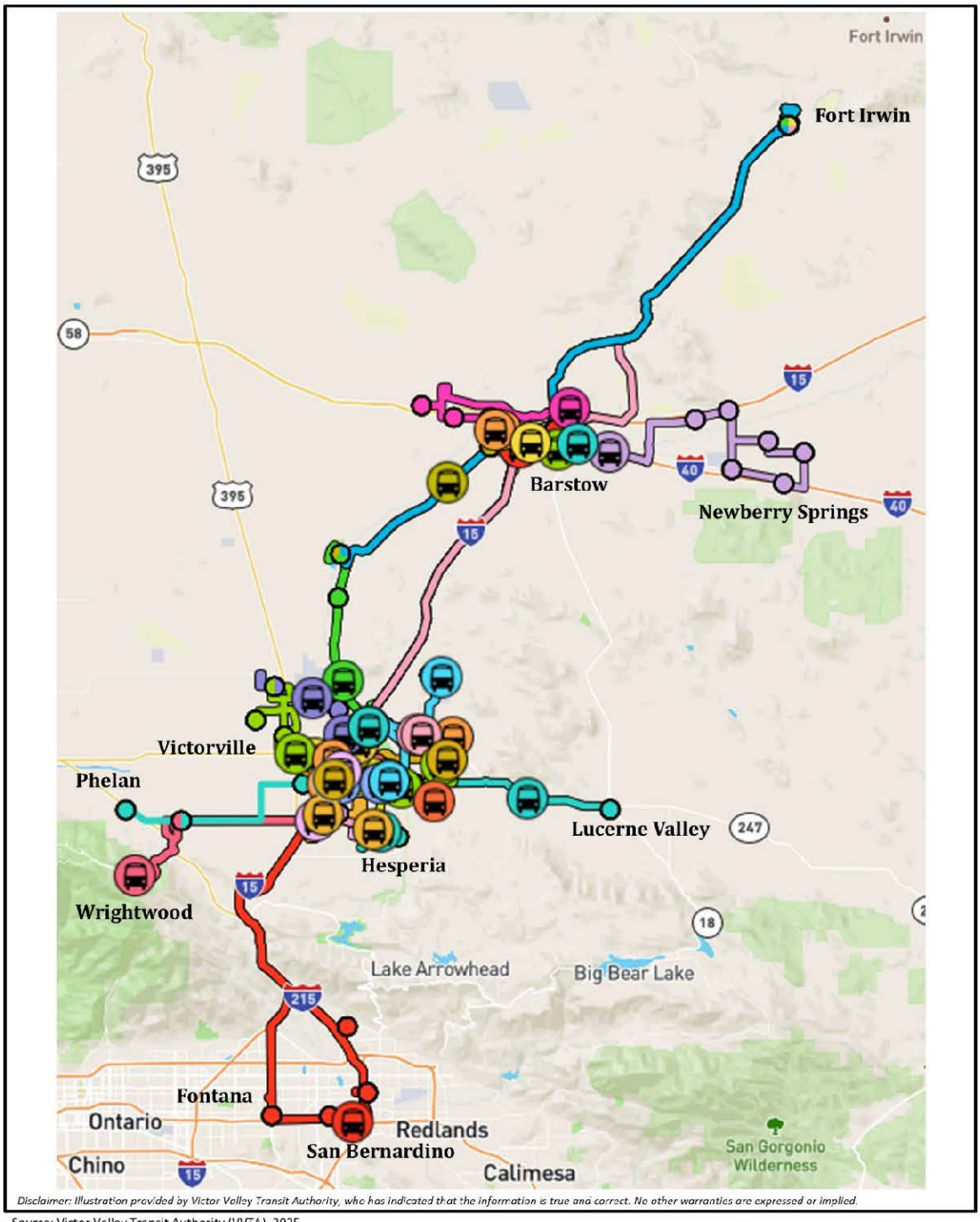
The existing transfer location, curbside on G Avenue and Olive Street at the southeast corner of those two roadways, would remain in operation as a bus stop. Lines 64 and 68 would be rerouted to the proposed transfer hub, bypassing the existing transfer point. Lines 50 and 66 would continue to serve the existing transfer point before terminating at the transfer hub. Weekday frequencies on lines 50 and 66 would be increased so that the total number of bus trips stopping at the existing transfer point would be approximately similar to the existing number.

3.1.3 Victor Valley Transit Authority

The VVTA provides transit bus service on 33 routes extending north as far as Fort Irwin northeast of Barstow; east as far as Newberry Springs east of Barstow; south as far as the cities of Fontana and Colton in the San Bernardino Valley; and west as far as the community of Phelan west of Hesperia. In addition to local services in the Victor Valley and Barstow areas, VVTA provides commuter service to Fort Irwin and intercity service extending from Barstow to the Victor Valley to San Bernardino (VVTA, 2025); **Figure 3.1-1** shows a VVTA system map. Annual ridership in 2022, the latest year for which data are available, was 603,000. Note that ridership declined by more than half during COVID compared to pre-Covid levels (the 2019 ridership was 1,539,000) (TMD, 2024, p. 25).

Extensive population and employment growth is forecast for VVTA's local service area over the 2025-2050 period (see further discussion in **Section 4.14,** *Population and Housing*). Accommodating anticipated growth in transit demand is one of the project's objectives.

Figure 3.1-1
VVTA SYSTEM MAP



Source: Victor Valley Transit Authority (VVTA), 2025.

VVTA Hydrogen Fueling Station and Hesperia Transfer Hub

Victor Valley Transit Authority System Map

UltraSystems

3.2 Hydrogen Fueling Station

The hydrogen fueling station (HFS) would include the following components:

Hydrogen Equipment Area

- 18,000-gallon Cryogenic Tank with Liquid Fill Port
- Three hydrogen pumps
- Pump Control Panel
- Hydrogen Buffer Vessels
- Vaporizers
- Vent Stacks
- Valve Panel
- Gaseous HP Hydrogen Compressor
- Air Compressors
- Electrical Switchgear
- Compressed Natural Gas Backup Generator
- Gaseous Compressor Chiller
- Hydrogen Dispensers for VVTA Buses (on existing fueling island)
- Hydrogen Dispenser for Public Use (southwest of existing fueling island, next to east side of E Street)
- Dispenser chiller for Public Dispenser (next to dispenser)

An 18-foot-high concrete masonry unit (CMU) wall would be built surrounding the west, north, and east sides of the proposed HFS.

Figure 3.2-1 shows a site plan for the fueling station.

Proposed Facilities in Existing Operations and Maintenance Facility

Hydrogen dispensers for buses would be next to the gasoline and compressed natural gas (CNG) dispensers in the operations and maintenance facility. The public hydrogen dispenser would also be adjacent to the operations and maintenance facility on the west side of the facility next to E Street; a dispenser chiller would be installed next to the dispenser (see **Figure 3.2-1**). Access for the public to the public dispenser would be from E Street on the west side of the operations and maintenance facility, VVTA bus access to the private dispensers would remain the same as current operations where they would enter the facility from the south side of the operations and maintenance facility off of Smoke Tree Street. No public access or public parking would be provided within the hydrogen equipment enclosure.

The fueling station is part of VVTA's transition plan to convert its bus fleet to 100-percent zero-emission by 2040 as the agency's effort to meet the requirements in the California Air Resources Board's Innovative Clean Transit Regulation.

Landscaping

Landscaping would be installed in a designated area about 105 feet by 52 feet, or 5,460 square feet, on the west side of the project site next to E Avenue.

Lighting

The finished site will have lights installed along the perimeter of the proposed CMU wall (internal and external to the equipment compound) and along the proposed chain-link fence separating the bus yard and equipment compound. Lights, activated by motion detectors, will be installed at strategic locations within the equipment compound to illuminate dark areas. Fueling operations will occur at night.

Operations

VVTA would use the fueling station for fueling buses mainly between the hours of 7:00 PM and 3:30 AM daily.

The fueling station would be open for public use 24 hours per day (Strandberg, 2025).

When VVTA's entire fleet of full-size buses is converted to hydrogen-fueled vehicles, scheduled for 2035, it is estimated that up to three deliveries of hydrogen per week will be needed; and annual hydrogen use by said bus fleet is estimated at about 461,176 kg (Strandberg, 2025).

Construction

Construction of the fueling station is scheduled for 7 months, from November 2025 to May 2026. The construction schedule by phase, with construction equipment, is shown below in **Table 3.2-1**. Construction would occur during daylight hours; no nighttime construction is planned. Temporary fencing will be installed along the construction site perimeter, to be replaced by the proposed CMU wall before project completion.

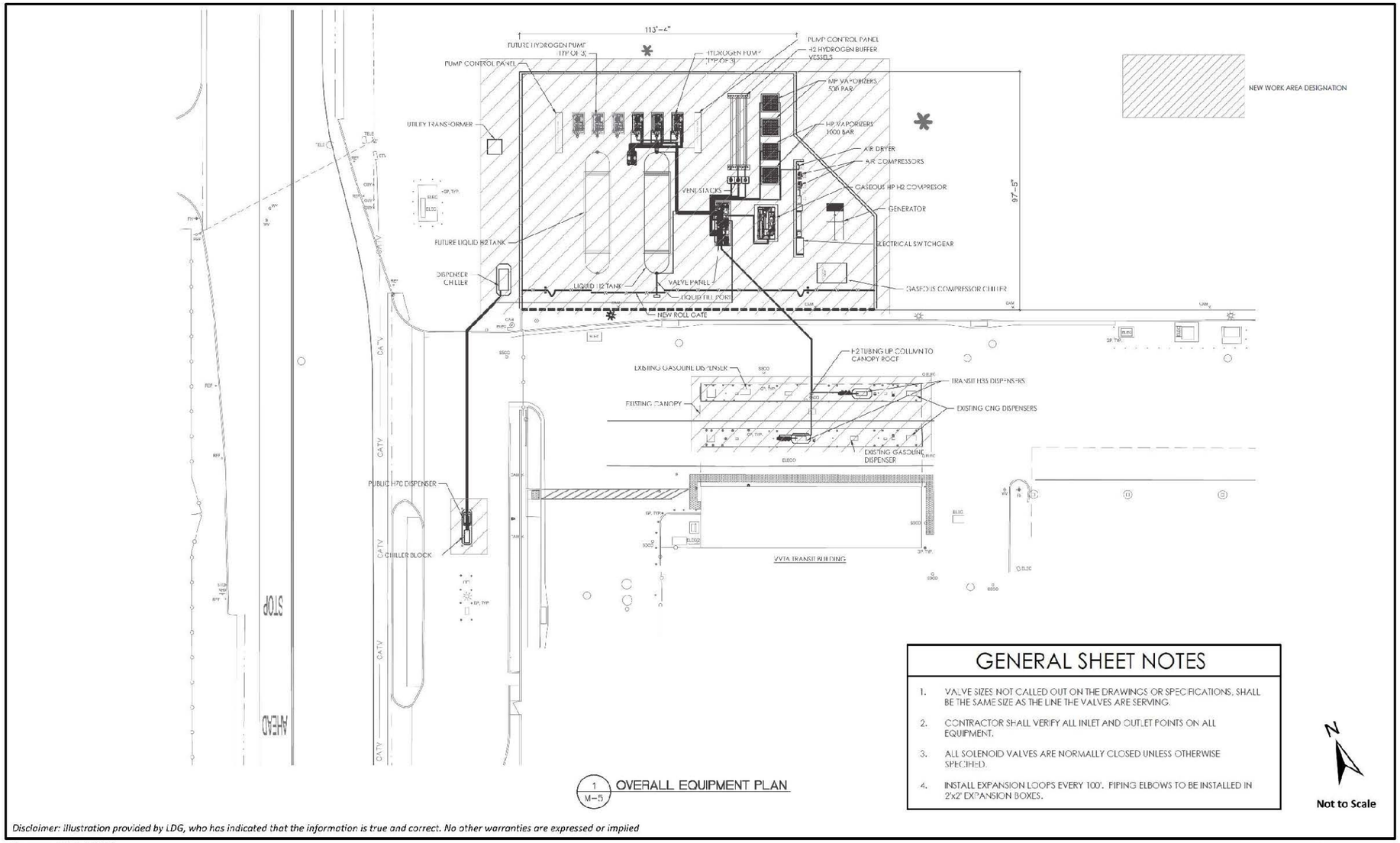
Estimated construction employment is between 5 and 20 workers, depending on construction phase (see **Table 3.2-1** below). All construction parking and staging would be conducted onsite and/or within the existing operations and maintenance facility.

Offsite Improvements

Construction would need to occur in E Avenue to connect the utility lines for the proposed project to the existing main lines. The half-width of E Avenue along the project site frontage would also be improved: widened, with curbs, gutters, and sidewalk.

The construction contractor would place barriers, detour signs, and use flag persons, as needed, for the safe passage of motorists, bicyclists, and pedestrians along E Avenue next to the project site (or along appropriate detour routes to be determined per an encroachment permit issued by the City of Hesperia Public Works Department).

Figure 3.2-1
SITE PLAN, HYDROGEN FUELING STATION



Source: LDG, 2024.

UltraSystems environmental•management•planning

VVTA Hydrogen Fueling Station and Hesperia Transfer Hub

Hesperia Fueling Station Site Plan 3.2-1

3.3 Transfer Hub

3.3.1 Proposed Facilities

The transfer hub would include 10 sawtooth bus bays with a platform between the two rows of bus bays for waiting passengers, with benches and a shade structure. **Figure 3.3-1** shows a site plan and **Figure 3.3-2** renderings of the transfer hub.

The project includes development of one 1,777-square foot, one-story building with lobby, driver breakroom, office, security office, two public gendered restrooms (two stalls each), two private all-gender restrooms, a ticketing office, and janitorial and electrical rooms. **Figure 3.3-3** shows a floor plan of the building, **Figure 3.3-4** an elevation; and **Figure 3.3-5** a rendering. The building would be in the south-central part of the project site.

Access, Parking, and Circulation

The main vehicular access to the site (for both buses and the public) would be via a four-lane driveway with access from Smoke Tree Street on the southern site boundary. Public parking would be at the west end of the site, including 95 automobile stalls consisting of 72 standard stalls, six accessible stalls, three EV charging station (EVCS) stalls, one van accessible EVCS stall, and 13 EV-capable stalls; and eight motorcycle stalls (see **Figure 3.3-1**). Three bicycle parking stations would be next to the south side of the proposed building. A passenger drop-off area, with separate driveway access to and from Smoke Tree Street, would be developed in the south-central part of the site just east of the proposed parking lot.

Landscaping

Landscaping encompassing 29,695 square feet and consisting of trees and small shrubs would be installed around much of the perimeter of the site; along the north side of the infiltration basin; and in several parking lot planters. A rectangular infiltration basin with 10,000-cubic-foot volume would be installed in the southeast corner of the project site. Eight-foot-high wrought iron fencing would be installed around the perimeter of the staff parking lot in the west end of the project site.

The project site includes 30 Joshua trees (*Yucca brevifolia*), 19 living and 11 dead. The 19 living trees may be removed or relocated; if relocated they may be incorporated into proposed landscaping onsite or moved offsite. Refer to **Section 4.4**, *Biological Resources*, for further discussion.

3.3.2 Operations

VVTA anticipates that seven routes would serve the transfer hub by 2029, and that operating hours of the hub would be 5 a.m. to 11 p.m. The seven routes would each have peak hour frequencies of 30 minutes (peak hours being approximately 6 to 9 a.m. and 2 to 6 p.m.), and about 238 daily bus trips would stop at the hub. A few employees would work at the hub: answering questions and selling fare media; providing security; and performing cleaning and maintenance (Strandberg, 2025). Daily boardings at the hub in 2029 are estimated at about 100, a net increase of 20 from the 80 boardings per day next to the post office. The security office is expected to be staffed two shifts per day, morning and afternoon (Strandberg, 2025).

The proposed hub would replace an existing transfer location for routes 50, 64, 66, and 68 at the intersection of G Avenue and Olive Street, next to a post office, about 0.5 mile south of the hub site.[5] Three of the routes (64, 66, and 68) are within Hesperia and the fourth route (50) extends from Hesperia to Victorville (VVTA, 2025). The existing transfer point is outdoors on a street corner, with one bus shelter and two benches (one bench inside the shelter and one outside); and no amenities such as restrooms or a drinking fountain. VVTA plans to add three bus routes that would serve the proposed transfer hub:

- Route 62: Hesperia to Victorville
- Route 65: local service, central to western Hesperia
- Route 67: Hesperia to Silverwood Lake (Strandberg, 2025; TMD, 2024).

After the transfer hub begins operating, Lines 64 and 68 would be rerouted to operate directly to the transfer hub and bypassing the existing transfer point. Lines 50 and 66 would continue to serve the existing transfer point before terminating at the transfer hub (see further discussion above in **Section 3.1**). The proposed transfer hub would be the second VVTA transfer facility in the Victor Valley; an existing VVTA transportation center is at 16858 D Street in the city of Victorville, next to the intersection of 4th and D streets.

3.3.3 Construction

Construction of the transfer hub is scheduled for 11 months, from October 2025 to August 2026. The construction schedule by phase, with construction equipment, is shown below in **Table 3.3-1**. All construction, parking and staging would be conducted onsite.

For safety reasons, temporary barricades would be used to limit access to the site during project construction and maintain safe access for construction workers. Construction would occur during daylight and during regular business hours. Lighting for the construction site would be limited to the minimum amount of light needed for safety and security.

Grading of the transfer hub site would involve export of about 3,010 cubic yards (cy) of soil, that would be stored indefinitely just north of the project site. The transfer hub project includes about 103,907 square feet of impervious surfaces; that entire area is currently pervious.

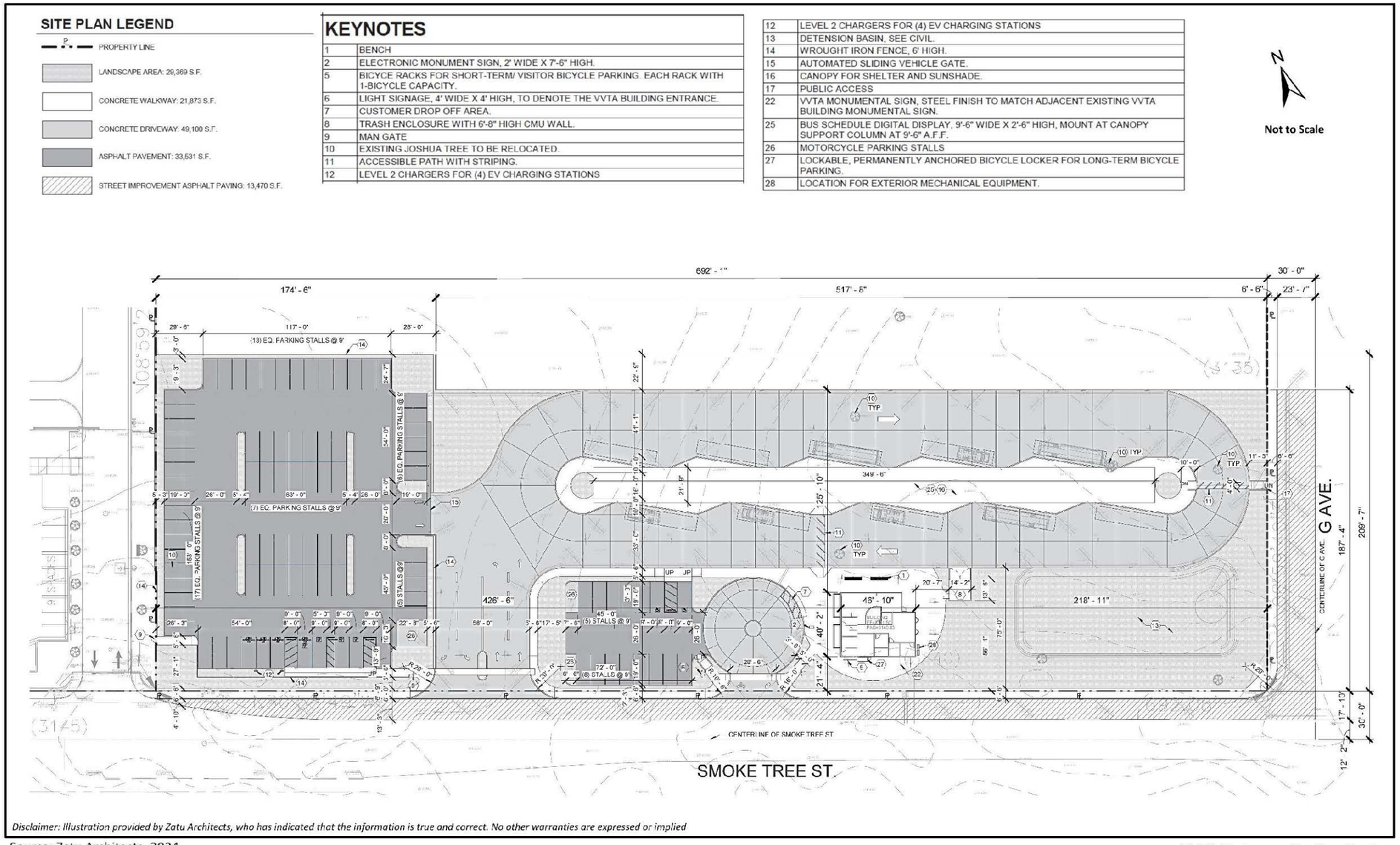
Off-Site Work

Off-site work for the construction of the transfer hub would include street improvements to the north half-width of Smoke Tree Street for the length of the project site frontage: widening; and installation of curb, gutter, and sidewalk for the length of the project site. The project also includes improvements to the west half-width of G Avenue for the length of the project site frontage: widening to 26 feet, and installation of curb, gutter, and sidewalk.

The construction contractor would place barriers, detour signs, and use flagmen, as needed, for the safe passage of motorists, bicyclists, and pedestrians along G Avenue and Smoke Tree Street next to the project site (or along appropriate detour routes to be determined per an encroachment permit issued by the City of Hesperia Public Works Department).

5 A fifth VVTA route, 114, operates on Main Street and E Avenue about 0.4 mile northwest of the existing transfer point, and provides limited (5 trips daily) commuter service to Fort Irwin (VVTA, 2025). VVTA plans to cancel Route 114 (Strandberg, 2025).

Figure 3.3-1
SITE PLAN, TRANSFER HUB



Disclaimer: Illustration provided by Zatu Architects, who has indicated that the information is true and correct. No other warranties are expressed or implied

Source: Zatu Architects, 2024.

UltraSystems environmental•management•planning

VVTA Hydrogen Fueling Station and Hesperia Transfer Hub

Hesperia Transfer Hub Site Plan 3.2-2

Figure 3.3-2
RENDERINGS, TRANSFER HUB

SITE WEST BIRD'S EYE VIEW

BUILDING ENTRANCE

BUILDING NORTH WEST

Not to Scale

Disclaimer: Illustration provided by Zatu Architects, who has indicated that the information is true and correct. No other warranties are expressed or implied

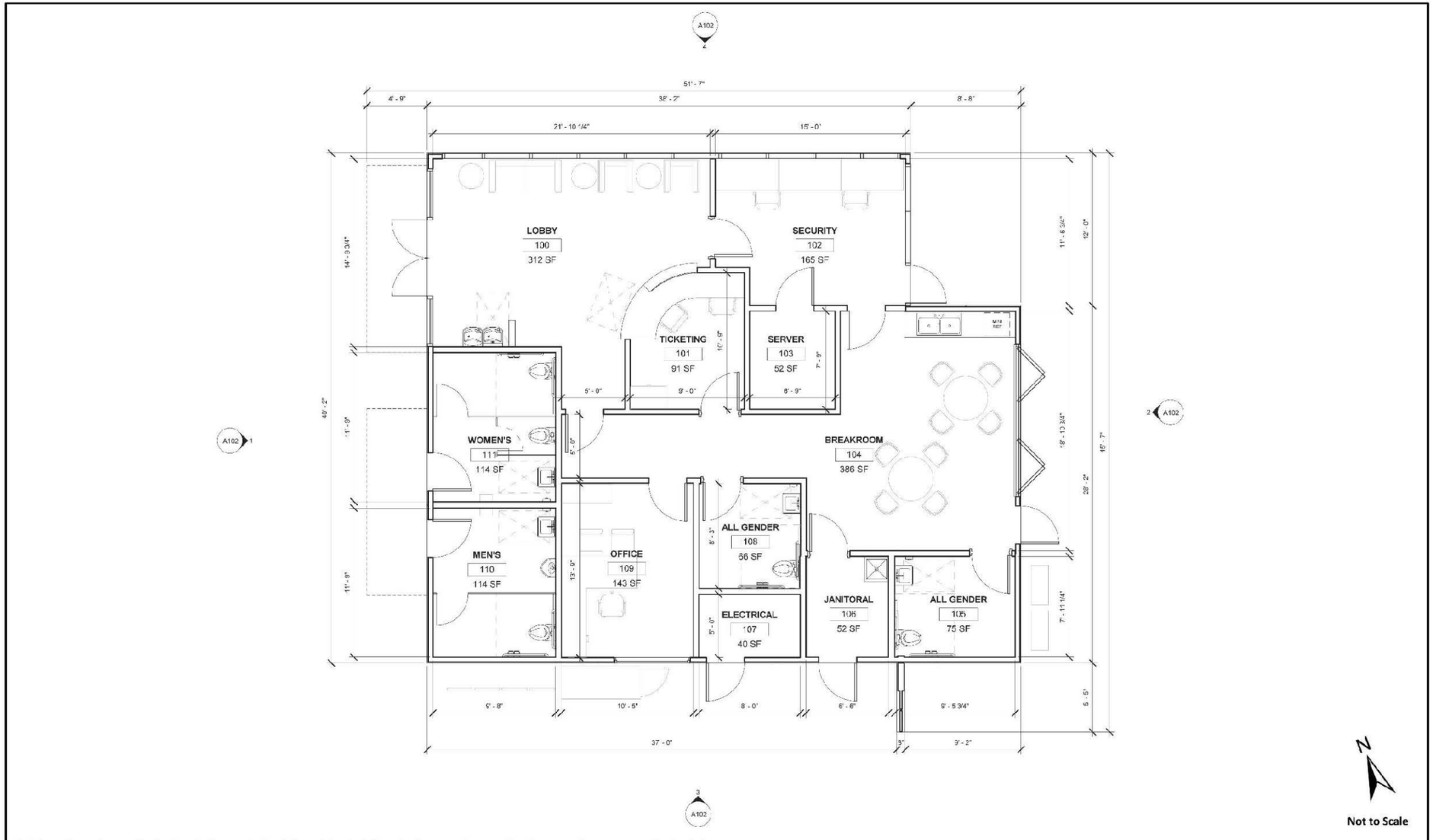
Source: Zatu Architects, 2024.

UltraSystems
environmental•management•planning

VVTA Hydrogen Fueling Station and Hesperia Transfer Hub

Hesperia Transfer Hub Rendering 3.2-3

Figure 3.3-3
FLOOR PLAN, PROPOSED BUILDING, TRANSFER HUB



Disclaimer: Illustration provided by Zatu Architects, who has indicated that the information is true and correct. No other warranties are expressed or implied

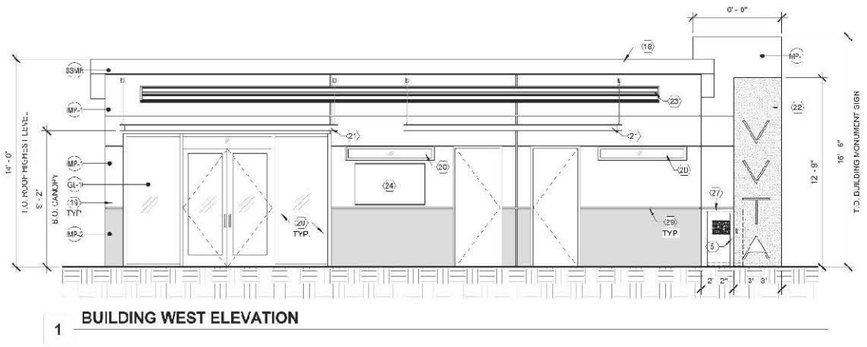
Source: Zatu Architects, 2024.

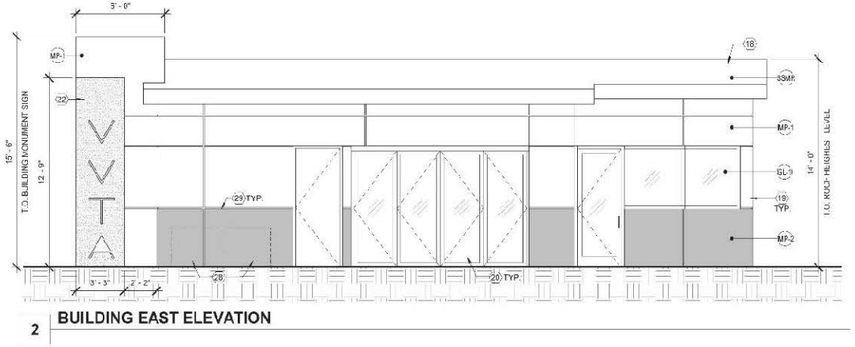
UltraSystems environmental•management•planning

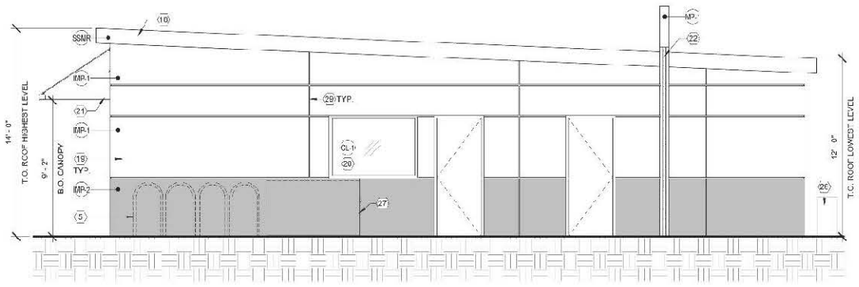
VVTA Hydrogen Fueling Station and Hesperia Transfer Hub

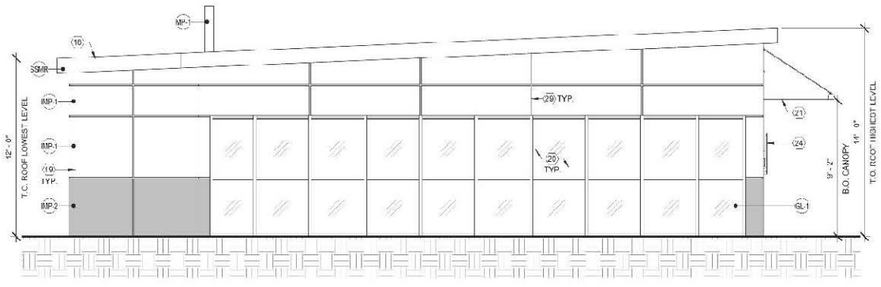
Hesperia Transfer Hub Building Floor Plan 3.2-4

Figure 3.3-4
ELEVATION, PROPOSED TRANSFER HUB BUILDING









Not to Scale

Disclaimer: Illustration provided by Zatu Architects, who has indicated that the information is true and correct. No other warranties are expressed or implied

Source: Zatu Architects, 2024.

UltraSystems environmental•management•planning

VVTA Hydrogen Fueling Station and Hesperia Transfer Hub

Hesperia Transfer Hub Building Elevation 3.2-5

Figure 3.3-5
RENDERING, PROPOSED TRANFER HUB BUILDING

BUILDING WEST ELEVATION

BUILDING EAST ELEVATION

BUILDING SOUTH ELEVATION

BUILDING NORTH ELEVATION

Not to Scale

Disclaimer: Illustration provided by Zatu Architects, who has indicated that the information is true and correct. No other warranties are expressed or implied

Source: Zatu Architects, 2024.

UltraSystems environmental•management•planning

VVTA Hydrogen Fueling Station and Hesperia Transfer Hub

Hesperia Transfer Hub Building Elevation 3.2-5

Table 3.3-1
CONSTRUCTION EQUIPMENT AND SCHEDULE, TRANSFER HUB

Construction Phase	Schedule, Months			Construction Equipment		Construction Workers, number	Square Feet
	Beginning	Ending	Duration	Types	Numbers		
Site Preparation	October 2025	October 2025	1	Loader	1	6	133,543
				Excavator	3		
				Fork Lift	2		
				Dump Truck	1		
				Generator	3		
				Water Truck	2		
				Sweeper	2		
Grading	October 2025	November 2025	1	Loader	1	6	133,543
				Excavator	3		
				Dump Truck	1		
				Water Truck	2		
				Sweeper	2		
Utilities Installation	November 2025	February 2026	4	Excavator	3	6	Not yet figured.
				Backhoe	1		
				Trencher	1		

Construction Phase	Schedule, Months			Construction Equipment		Construction Workers, number	Square Feet
	Beginning	Ending	Duration	Types	Numbers		
				Water Truck	2		
				Sweeper	2		
Building Construction	November 2025	June 2026	8	Aerial Lifts	4	25	1,777
				Air Compressor	6		
				Auger	1		
				Crane	1		
				Welder	2		
				Fork Lift	2		
				Generator	3		
				Sweeper	2		
Paving	February 2026	August 2026	6	Dump Truck	1	12	104,504
				Water Truck	2		
				Paving Equipment	1		
				Concrete Saw	2		
				Pressure Washer	2		
				Plate Compactor	2		
				Sweeper	2		

Construction Phase	Schedule, Months			Construction Equipment		Construction Workers, number	Square Feet
	Beginning	Ending	Duration	Types	Numbers		
				Signage Board	2		
Landscaping Installation	June 2026	August 2026	2	Backhoe	1	6	29,400
				Auger	1		
				Sweeper	2		

Source: Macro-Z Technology,, 2025

3.4 Discretionary Actions

The Victor Valley Transit Authority Board of Directors, as the CEQA lead agency, will consider the approval of the funding and development of the proposed project. As part of the planning process, the proposed project includes applications for the following discretionary approvals by the City of Hesperia:

- Design Review (for both projects)
- Conditional Use Permit (for both projects)

3.4.1 Other Permits and Approvals

Following the VVTA Board of Directors approval of the proposed project, and the City's adoption of the Initial Study/Mitigated Negative Declaration and approval of the Design Review and Conditional Use Permit, the following permits/approvals, as shown in **Table 3.6-1,** would be required prior to construction.

Table 3.6-1
PERMITS AND APPROVALS

Agency	Permit or Approval
City of Hesperia Building and Safety	Site Plan review and approval and Grading and Building Permits
San Bernardino County Fire Protection District	Building plan check and approval. Review for compliance with the current California Fire Code, current California Building Code, California Health & Safety Code and City of Hesperia Municipal Code. Plans for fire detection and alarm systems, and automatic sprinklers.
Lahontan Regional Water Quality Control Board (Region 6)	Water quality permits
Mojave Desert Air Quality Management District	Permit to Construct
California Department of Fish and Wildlife	Incidental Take Permit

4.0 ENVIRONMENTAL CHECKLIST

Environmental Factors Potentially Affected

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

☐ Aesthetics	☐ Agricultural and Forest Resources	☐ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Energy
☒ Geology / Soils	☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials
☐ Hydrology / Water Quality	☐ Land Use / Planning	☐ Mineral Resources
☐ Noise	☐ Population / Housing	☐ Public Services
☐ Recreation	☐ Transportation	☒ Tribal Cultural Resources
☐ Utilities/Service Systems	☐ Wildfire	☒ Mandatory Findings of Significance

Determination (To Be Completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

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

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

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

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

Signature

6/27/25

Date

Dustin Strandberg

Printed Name

Victor Valley Transit Authority

Evaluation of Environmental Impacts

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

(2) All answers must take into account the whole action involved, including offsite as well as onsite, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

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

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

(5) Earlier analyses may be used where, pursuant to the tiering, Program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. (See Section 15063(c)(3)(D) of the CEQA Guidelines. In this case, a brief discussion should identify the following:

(a) Earlier Analyses Used. Identify and state where the earlier analysis is available for review.

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

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

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

to the page or pages where the statement is substantiated. A source list should be attached and other sources used or individuals contacted should be cited in the discussion.

(7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

(8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

(9) The explanation of each issue should identify:

(a) The significance criteria or threshold, if any, used to evaluate each question; and

(b) The mitigation measure identified, if any, to reduce the impact to less than significant.

4.1 Aesthetics

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?			**X**	
b) Substantially damage scenic resources, including, but not limited to, trees, outcroppings, and historic buildings within a state scenic highway?				**X**
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			**X**	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			**X**	

A "visual environment" includes the built environment (development patterns, buildings, parking areas, and circulation elements) and natural environment (such as hills, vegetation, rock outcroppings, drainage pathways, and soils) features. Visual quality, viewer groups and sensitivity, duration, and visual resources characterize views.

- Visual quality refers to the general aesthetic quality of a view, such as vividness, intactness, and unity.
- Viewer groups identify who is most likely to experience the view.
- High-sensitivity land uses include residences, schools, playgrounds, religious institutions, and passive outdoor spaces such as parks, playgrounds, and recreation areas.
- Duration of a view is the amount of time that a particular view can be seen by a specific viewer group.
- Visual resources refer to unique views, and views identified in local plans, from scenic highways, or of specific unique structures or landscape features.

a) Would the project have a substantial adverse effect on a scenic vista?

Less than Significant Impact

Scenic vistas generally include extensive panoramic views of natural features, unusual terrain, or unique urban or historic features, for which the field of view can be wide and extend into the distance, and focal views that focus on a particular object, scene or feature of interest. The city's General Plan Open Space Element contains scenic vistas including Mojave River to the southeast, the San Bernardino and San Gabriel Mountain ranges to the south and the surrounding Victor Valley, along with neighboring hillsides and the natural desert environment. These scenic resources provide a visual relief from the man-made structures in the city and also connect its residents to the natural environment (City of Hesperia, 2019a, p. OS-13).

The project site is located in a sparsely developed portion of the city. The Mojave River runs along the city's eastern border (Michael Brandman Associates, 2010a, p. 2-1). However, the project site is located on the southern portion of the city and has intervening developments that block views of the Mojave River.

There are partial views of the San Bernardino and San Gabriel Mountains from the existing project site and the surrounding developments adjacent to the project site. To the north of the project site is a single-family home, and the project might permanently block a partial view of the mountains from this private location. However, aesthetics impacts are limited to public views and most viewers of the area would likely be people driving through the project area as it is largely vacant along G Avenue and Smoke Street. Therefore, the development of the two projects would not significantly impact views of scenic vistas compared to the existing setting, and impacts would be less than significant.

Hydrogen Fueling Station (HFS)

The proposed hydrogen fueling station will include an 18-foot-high concrete masonry unit (CMU) wall, to be built surrounding the west, north, and east sides of the proposed HFS. However, the height and mass and scale of the wall would be similar to and consistent with that of industrial and commercial buildings surrounding the project site. Impacts would, therefore, be less than significant.

Transfer Hub

The proposed project will develop a 16-foot one-story building and would be similar to and consistent with industrial and commercial development surrounding the project site. Impacts would, therefore, be less than significant.

b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact

The California Department of Transportation (Caltrans) provides information regarding officially designated or eligible state scenic highways, designated as part of the California Scenic Highway Program. The closest designated state scenic highway to the project site is State Route 2 (SR-2) near Wrightwood at Big Pines Highway in San Bernardino County, approximately 20.7 miles away (see **Figure 4.1-1**). The nearest eligible state scenic highway is State Route 138 (SR-138) near Silverwood Lake, located approximately 5.38 miles from the site. Due to the large distance and

intervening development between SR-2, construction, and implementation, the project would have no impacts on state scenic highways. Therefore, the project would have no impacts on trees, rock outcroppings and historic buildings within a state scenic highway.

Hydrogen Fueling Station and Transfer Hub

The development of the two projects would not damage scenic resources or obstruct scenic views. Thus, no impact would occur.

c) In non-urbanized areas, would the project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less than Significant Impact

The project site is located in a sparsely developed area of the city, characterized by residential, commercial, industrial, and undeveloped land uses. The proposed development would be consistent with the surrounding environment and would not significantly alter the site's existing visual character. The design and scale of the project will be in harmony with similar developments in the vicinity, minimizing any potential visual impacts. Refer to **Table 4.1-1**, which describes the existing visual character in the vicinity of the project site.

Hydrogen Fueling Station and Transfer Hub

The project would have a less than significant impact on the existing visual character and quality of public views, as it is consistent with the surrounding low-density development and does not introduce substantial visual changes or development that is out of scale and character with that of the surrounding area.

Figure 4.1-1
STATE SCENIC HIGHWAYS

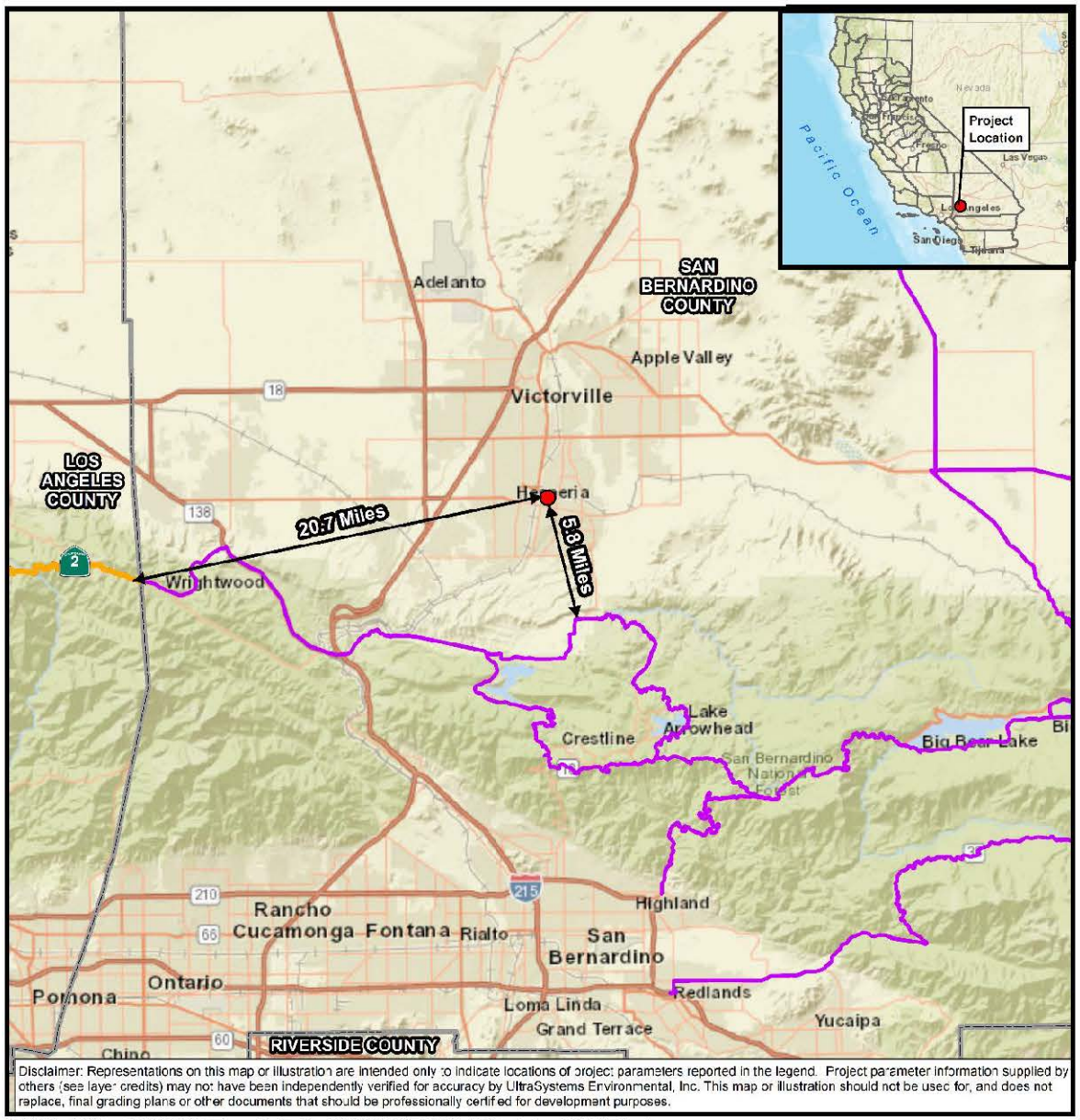


Table 4.1-1
EXISTING VISUAL CHARACTER AND LAND USES IN THE PROJECT AREA

Location	General Characteristics	Existing Lighting	Building Height and Design	Landscaping
Project Site	Undeveloped land	None	None	Grass and dirt
Surrounding Areas				
North	Undeveloped land, storage, single-family home	None	Vacant land, Single-story storage unit with stucco exterior, One-story home with white stucco exterior walls and front yard.	Ornamental vegetation consisting of trees and shrubs.
South	CNG Gas Station, One-story Victor Valley Transit Authority	Exterior lighting is associated with the residential developments and street lighting.	Single-story building with stucco exterior walls painted in varying colors. Also includes outdoor parking and gas fueling stations	Ornamental landscaping, including a few trees and ornamental vegetation.
East	Undeveloped land	None	Vacant land	Sparse brush and dirt
West	One-story storage units, industrial tanks	Exterior lighting associated with residential developments and street lighting.	Single-story buildings with tiled sloping roofs and stucco exterior walls painted in varying colors. Outdoor parking.	Ornamental landscaping, including a few trees and ornamental vegetation.

Source: UltraSystems, 2025 and Google Earth, 2025.

Figure 4.1-2
VIEWS FOR SURROUNDING LAND USES IN THE PROJECT AREA – HYDROGEN FUELING STATION

Photo 1: North-facing view from E Ave, west of the project site.

Photo 1: East-facing view of the project site from E Ave.

Photo 3: South-facing view of the project site from E Ave, west of the project site.

Photo 4: West-facing view from E Ave, west of the project site.

Figure 4.1-3
VIEWS FOR SURROUNDING LAND USES IN THE PROJECT AREA – TRANSFER HUB

Photo 1: North-facing view of the project site from Smoke Tree St.

Photo 1: West-facing view of the project site from Smoke Tree St, south of project site.

Photo 3: South-facing view of the project site from Smoke Tree St.

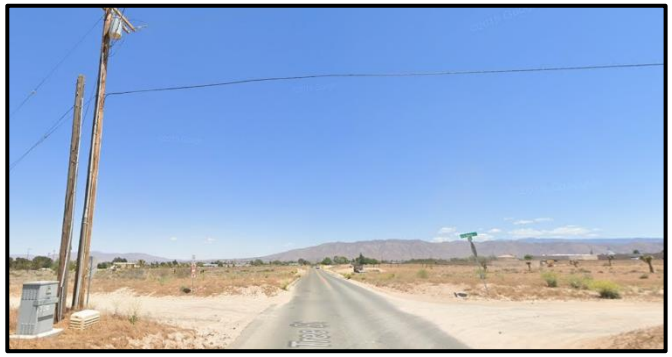


Photo 4: East-facing view from the southeast corner of the project site (Intersection of Smoke Tree St. and G Ave).

Construction

Hydrogen Fueling Station and Transfer Hub

Construction of the proposed projects would include views associated with construction activities, construction staging areas, grading, excavation, construction equipment, material storage areas, construction debris, exposed trenches, etc. Construction elements would be inconsistent with the visual character of the project vicinity. Project construction could temporarily degrade the existing visual character of the project area and its immediate surroundings. However, this impact would be short term, and these elements would be removed following construction. Therefore, construction impacts would be less than significant.

Operation

Hydrogen Fueling Station

The project will include an 18-foot-high concrete masonry unit (CMU) wall, surrounding the west, north, and east sides of the proposed HFS. Additionally, the project will include landscaping, to be installed in a designated area about 105 feet by 52 feet, or 5,460 square feet, on the west side of the project site next to E Avenue. The proposed project would be designed to adhere to the City's design guidelines to complement the existing buildings and architecture surrounding the project site. Therefore, the project would not significantly impact the characteristics of the project area or public views. Impacts would be less than significant, and no mitigation is required.

Transfer Hub

The completed project would consist of one 1,777-square foot, one-story building with lobby, driver breakroom, office, security office, two public gendered restrooms (two stalls each), two private all-gender restrooms, a ticketing office, and janitorial and electrical rooms. The proposed transfer hub would also include associated surface parking lots and ornamental landscaping. Project design and architectural style would complement the surrounding neighborhood as the maximum building height is approximately 15 feet, 6 inches. The proposed project would not be out of character with the surrounding area, which consists of primarily industrial and commercial uses and vacant land. **Figures 4.1-3 and 4.1-4** show conceptual renderings of the proposed project. The proposed project would not degrade the existing visual character of the site because new buildings would enhance existing on-site conditions and be consistent with the general character of surrounding neighborhood buildings in terms of architectural style and setbacks.

Figure 4.1-3
TRANSFER HUB CONCEPTUAL RENDERINGS

BUILDING WEST ELEVATION

BUILDING EAST ELEVATION

BUILDING SOUTH ELEVATION

BUILDING NORTH ELEVATION

Not to Scale

Disclaimer: Illustration provided by Zatu Architects, who has indicated that the information is true and correct. No other warranties are expressed or implied

Source: Zatu Architects, 2024.

UltraSystems

VVTA Hydrogen Fueling Station and Hesperia Transfer Hub

Hesperia Transfer Hub Building Elevation 3.2-5

Figure 4.1-4
TRANSFER HUB CONCEPTUAL RENDERINGS

SITE WEST BIRD'S EYE VIEW

BUILDING ENTRANCE

BUILDING NORTH WEST

Not to Scale

Disclaimer: Illustration provided by Zatu Architects, who has indicated that the information is true and correct. No other warranties are expressed or implied

Source: Zatu Architects, 2024.

UltraSystems

VVTA Hydrogen Fueling Station and Hesperia Transfer Hub

Hesperia Transfer Hub Rendering 3.2-3

d) Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant Impact

The proposed project would introduce new sources of light and glare, including street and building illumination, security lighting, nighttime traffic, and temporary lighting from construction activities. While lighting in previously undeveloped areas can affect the quality of nighttime skyline, the project is primarily surrounded by similar industrial developments, ensuring consistency in scale, function, and lighting patterns with neighboring properties.

Hydrogen Fueling Station

Construction will take place during daylight hours with no foreseeable plans to perform construction at night. Lights with motion detectors will be installed at trailers to illuminate when motion is detected. Security cameras will be installed at each trailer and in areas where vulnerable equipment and materials are stored.

The finished site will have lights installed along the perimeter of the proposed CMU wall (internal and external to the equipment compound) and along the proposed chain-link fence separating the bus yard and equipment compound. Lights, activated by motion detectors, will be installed at strategic locations within the equipment compound to illuminate dark areas. Fueling operations will occur at night.

Transfer Hub

During construction, diesel powered mobile tower lights will be used as required for construction activities when natural light is limited. Night operations are not anticipated for this project.

The project would be in compliance with Section 16.16.415, Subsection D of the City of Hesperia's Municipal Code - Site design Standards and Guidelines:

City of Hesperia's Municipal Code Section 16.16.415 sets forth requirements for exterior lighting, as follows:

> "Building setbacks shall be increased when adjacent to residentially designated properties *to mitigate negative impacts due to noise, vibration, light and glare, and aesthetics* [emphasis added]. Where an industrial project abuts a residentially designated property, a minimum of ten feet of the required setback shall be devoted entirely to shrubs and trees, at least six feet in height (exclusive of any planter area curb)."

The City of Hesperia Development Code contains standards addressing lighting through its design policies for industrial uses. Adherence to the design standards of the City of Hesperia Development Code would ensure that light and glare from new developments would be minimized and that significant impacts would not occur (City of Hesperia, 2025a). Landscaping buffers and screening elements detailed in the project design features contribute to reducing glare by providing a visual barrier between the project site and the residence to the north of Live Oak Street **(Refer to Section 3.0)**. Therefore, the proposed project would have less than significant impact regarding light and glare.

4.2 Agriculture and Forestry Resources

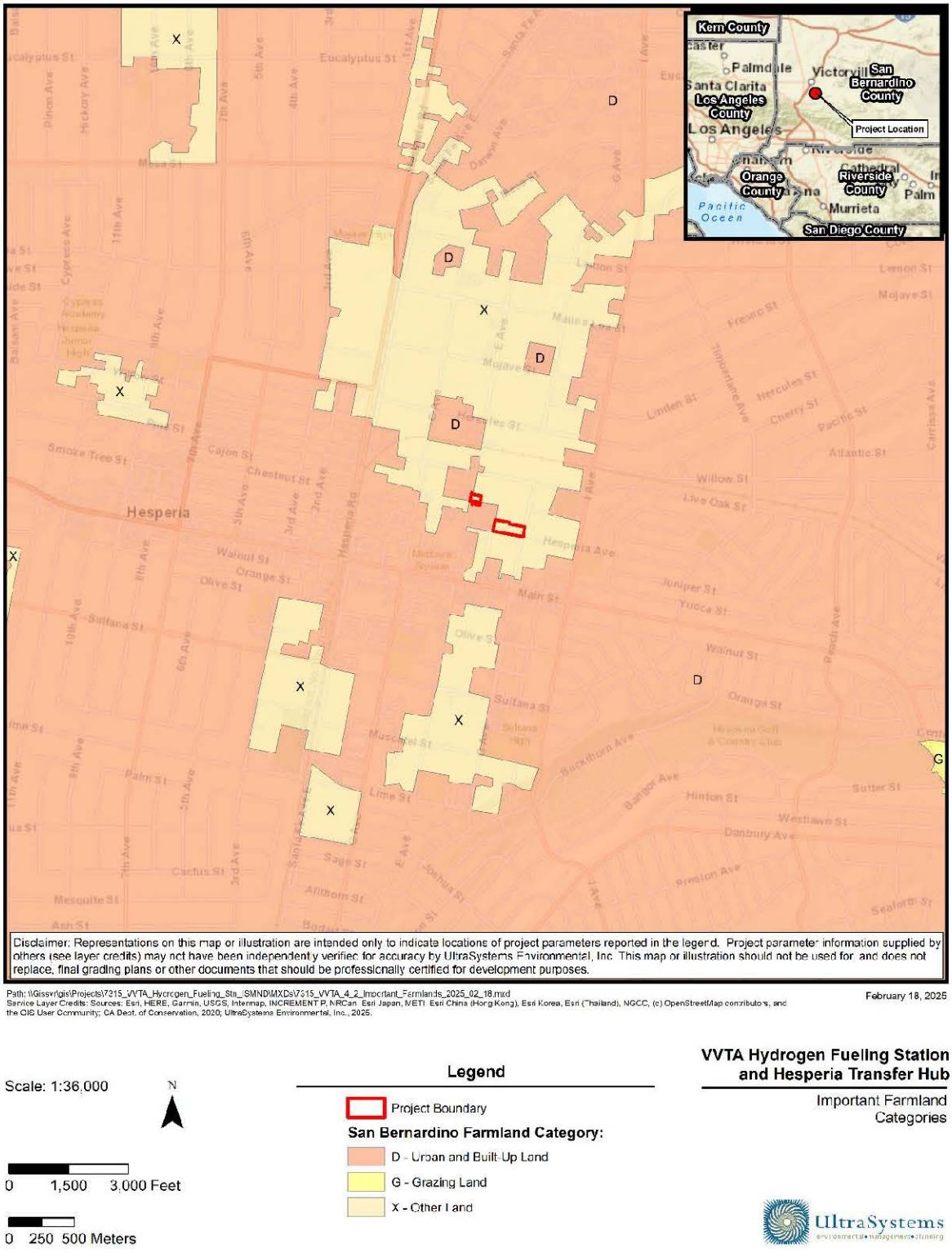
Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				**X**
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				**X**
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code § 12220(g)), timberland (as defined by Public Resources Codes § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104(g))?				**X**
d) Result in the loss of forest land or conversion of forest land to non-forest use?				**X**
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				**X**

a) Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact

The project site and surrounding uses are designated by the Division of Land Resource Protection (DLRP) as "Other Lands" (see **Figure 4.2-1**), which is land not included in any other mapping category. Other Land includes low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than forty acres. (DOC, 2016) Therefore, no farmland would be converted to non-agricultural use and no impacts would occur.

Figure 4.2-1
IMPORTANT FARMLAND CATEGORIES



b) Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact

The project site is zoned General Industry (I1/I2) and is not zoned for agricultural use. Williamson Act contracts restrict the use of privately-owned land to agriculture and compatible open-space uses under contract with local governments; in exchange, the land is taxed based on actual use rather than potential market value. Williamson Act contracts are made only on land within agricultural reserves; the project site is not within an agricultural reserve. Therefore, the project would not conflict with existing zoning for agricultural use or a Williamson Act contract and no impact would occur.

c) Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code § 12220(g)), timberland (as defined by Public Resources Codes § 4526), or timberland zoned Timberland Production (as defined by Government Code § 51104(g))?

No Impact

The project site is zoned for General Industry (I1/I2); the site is not zoned for forest, timberland, or timberland production use. Therefore, project development would not conflict with zoning for forest land or timberland, and no impact would occur.

d) Would the project result in the loss of forest land or conversion of forest land to non-forest use?

No Impact

The project site and surroundings are not cultivated for forest resources. Therefore, project development would not result in the loss of forest land or conversion of forest land to non-forest use, and no impact would occur.

e) Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact

The project site is vacant and has a bus maintenance yard to the southeast and low-density developments relating to manufacturing and industry to the east. No important farmland is near the project site; the nearest farmland is Grazing Farmland approximately 2.7 miles to the east. No forest land is present on or near the project site.

Therefore, project development would not indirectly cause conversion of farmland to non-agricultural use or conversion of forest land to non-forest use, and no impacts would occur.

4.3 Air Quality

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?			**X**	
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?			**X**	
c) Expose sensitive receptors to substantial pollutant concentrations?			**X**	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			**X**	

4.3.1 Pollutants of Concern

Criteria pollutants are air pollutants for which acceptable levels of exposure can be determined and an ambient air quality standard has been established by the U.S. Environmental Protection Agency (USEPA) and/or the California Air Resources Board (ARB). The criteria air pollutants of concern are nitrogen dioxide (NO_2), carbon monoxide (CO), particulate matter (PM_{10} and $PM_{2.5}$), sulfur dioxide (SO_2), lead (Pb), and ozone, and their precursors, such as reactive organic gases (ROG) (which are ozone precursors). Presented below are descriptions of the air pollutants of concern and their known health effects.

The project is in the southwestern San Bernardino County portion of the Mojave Desert Air Basin (MDAB), for which the Mojave Desert Air Quality Management District (MDAQMD) is substantially responsible for air pollution control. The MDAB is classified as a dry-hot desert (BWh), with portions classified as dry-very hot desert (BWhh), to indicate that at least three months have maximum average temperatures over 100.4 degrees Fahrenheit (°F) (MDAQMD, 2020a, p. 6-7). **Table 4.3-1** shows the attainment status of the MDAB for each criteria pollutant for both the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS). Presented below is a description of the air pollutants of concern and their known health effects.

Nitrogen oxides (NO_X) serve as integral participants in the process of photochemical smog production and are precursors for certain particulate compounds that are formed in the atmosphere, and for ozone. A precursor is a directly emitted air contaminant that, when released into the atmosphere, forms, causes to be formed, or contributes to the formation of a secondary air contaminant for which an ambient air quality standard (AAQS) has been adopted, or whose presence

in the atmosphere will contribute to the violation of one or more AAQSs. When NO_X and ROG are released into the atmosphere, they can chemically react with one another in the presence of sunlight to form ozone. The two major forms of NO_X are nitric oxide (NO) and NO_2. NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. NO_2 is a reddish-brown pungent gas formed by the combination of NO and oxygen. NO_2 acts as an acute respiratory irritant and eye irritant and increases susceptibility to respiratory pathogens (USEPA, 2011).

Table 4.3-1
FEDERAL AND STATE ATTAINMENT STATUS

Pollutants	Federal Classification	State Classification
Ozone (O_3) – 1-hour standard	Non-attainment	Non-attainment
Ozone (O_3) – 8-hour standard		
Particulate Matter (PM_{10})	Non-attainment	Non-attainment
Fine Particulate Matter ($PM_{2.5}$)	Unclassified/Attainment	Non-attainment
Carbon Monoxide (CO)	Unclassified/Attainment	Attainment
Nitrogen Dioxide (NO_2)	Unclassified/Attainment	Attainment
Sulfur Dioxide (SO_2)	Unclassified/Attainment	Attainment
Sulfates	No Federal Standards	Attainment
Lead (Pb)	Unclassified/Attainment	Attainment
Hydrogen Sulfide (H_2S)	No Federal Standards	Unclassified
Visibility Reducing Particles		

Source: MDAQMD, 2025.

Carbon monoxide (CO) is a colorless, odorless non-reactive pollutant produced by incomplete combustion of fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, such as the project location, automobile exhaust accounts for most CO emissions. CO is a non-reactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. Local meteorological conditions influence CO concentrations: primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, a typical situation at dusk in urban areas between November and February. The highest levels of CO typically occur during the colder months of the year when inversion conditions are more frequent. CO competes with oxygen, often replacing it in the blood, thus reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can be dizziness, fatigue, and impairment of central nervous system functions. High concentrations are lethal (USEPA, 2010).

Particulate matter (PM) consists of finely divided solids or liquids, such as soot, dust, aerosols, fumes and mists. Primary PM is emitted directly into the atmosphere from activities such as agricultural operations, industrial processes, construction and demolition activities, and entrainment of road dust into the air. Secondary PM is formed in the atmosphere from predominantly gaseous combustion by-product precursors, such as sulfur oxides, NO_X, and ROGs.

Particle size is a critical characteristic of PM that primarily determines the location of PM deposition along the respiratory system (and associated health effects) as well as the degradation of visibility through light scattering. In the United States, federal and state agencies have focused on two types of PM. PM_{10} corresponds to the fraction of PM no greater than 10 micrometers in aerodynamic diameter and is commonly called respirable particulate matter, while $PM_{2.5}$ refers to the subset of PM_{10} of aerodynamic diameter smaller than 2.5 micrometers, which is commonly called fine particulate matter.

PM_{10} and $PM_{2.5}$ deposition in the lungs results in irritation that triggers a range of inflammation responses, such as mucus secretion and bronchoconstriction, and exacerbates pulmonary dysfunctions, such as asthma, emphysema, and chronic bronchitis. Sufficiently small particles may penetrate the bloodstream and impact functions such as blood coagulation, cardiac autonomic control, and mobilization of inflammatory cells from the bone marrow. Individuals susceptible to higher health risks from exposure to PM_{10} airborne pollution include children, the elderly, smokers, and people of all ages with low pulmonary/cardiovascular function. For these individuals, adverse health effects of PM_{10} pollution include coughing, wheezing, shortness of breath, phlegm, bronchitis, and aggravation of lung or heart disease, leading, for example, to increased risks of hospitalization and mortality from asthma attacks and heart attacks (USEPA, 2019a).

Reactive organic gases (ROG) are defined as any compound of carbon, excluding CO, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions. It should be noted that there are no state or national ambient air quality standards for ROG because they are not classified as criteria pollutants. They are regulated, however, because a reduction in ROG emissions reduces certain chemical reactions that contribute to the formation of ozone. ROG are also transformed into organic aerosols in the atmosphere, which contribute to higher PM_{10} and lower visibility. The term "ROG" is used by the ARB for this air quality analysis and is defined the same as the federal term "volatile organic compound" (VOC).

Ozone is a secondary pollutant produced through a series of photochemical reactions involving ROG and NO_X. Ozone creation requires ROG and NO_X to be available for approximately three hours in a stable atmosphere with strong sunlight. Because of the long reaction time, peak ozone concentrations frequently occur downwind of the sites where the precursor pollutants are emitted. Thus, ozone is considered a regional, rather than a local, pollutant. The health effects of ozone include eye and respiratory irritation, reduction of resistance to lung infection and possible aggravation of pulmonary conditions in persons with lung disease. Ozone is also damaging to vegetation and untreated rubber (USEPA, 2020f).

4.3.2 Climate/Meteorology

Air quality is affected by both the rate and location of pollutant emissions, and by meteorological conditions that influence movement and dispersal of pollutants. Atmospheric conditions such as wind speed, wind direction, and air temperature gradients, along with local topography, provide the link between air pollutant emissions and air quality.

The project site is located in San Bernardino County, in the southwest portion of the Mojave Desert Air Basin (MDAB), which is bordered in the southwest by the San Bernardino Mountains, which are separated from the San Gabriel Mountains by the Cajon Pass (4,200 feet elevation). The MDAB is an assemblage of mountain ranges interspersed with long broad valleys that often contain dry lakes. Many of the lower mountains which dot the vast terrain rise from 1,000 to 4,000 feet above the valley floor. Prevailing winds in the MDAB are out of the west and southwest. These prevailing winds are due to the proximity of the MDAB to coastal and central regions and the blocking nature of the Sierra Nevada Mountains to the north; air masses pushed onshore in Southern California by differential heating are channeled through the MDAB (MDAQMD, 2020).

The nearest meteorological station is the Hesperia station (#043935, latitude 34.41667°, longitude: - 117.3°) (WRCC, 2025), which is approximately 0.78 mile southwest of the project site, with a period of record from January 1, 1910 to June 30, 1977. However, data from another station near the project site, Victorville Pump Pt meteorological station (#049325; latitude 34.5350°, longitude: - 117.3058°) (WRCC, 2025), approximately 7.52 miles north of the project site, were used because the period of record (January 1917 – June 2016) is more recent. The annual average high and low temperatures recorded there are 77.5°F and 43.9°F, respectively. Average winter (December, January, and February) high and low temperatures are approximately 60.1°F and 30.7°F, respectively, and average summer (June, July, and August) high and low temperatures are approximately 95.6°F and 58.4°F, respectively. The annual average of total precipitation is approximately 5.52 inches, which occurs mostly during the winter and relatively infrequently during the summer. Monthly precipitation averages approximately 0.93 inch during the winter (December, January, and February), approximately 0.43 inch during the spring (March, April, and May), approximately 0.35 inch during the fall (September, October, and November), and approximately 0.13 inch during the summer (June, July, and August).

4.3.3 Local Air Quality

The project site is served by the MDAQMD's Hesperia-Olive Street air monitoring site (ARB Number 36201), 0.62 mile southeast at 17288 Olive Street in Hesperia. This station monitors ozone and PM_{10}. The nearest station that monitors $PM_{2.5}$ and NO_2 is Victorville-14306 Park Avenue at 14306 Park Avenue in Victorville (ARB Number: 36306), about 6.17 miles north of the project. The ambient air quality data in the project vicinity as recorded from 2021 through 2023, along with applicable standards, are shown in **Table 4.3-2.**

Table 4.3-2
AMBIENT AIR QUALITY MONITORING DATA

Air Pollutant	Standard/Exceedance	2021	2022	2023
Ozone – Hesperia-Olive Street	Max. 1-hour Concentration (ppm) Max. 8-hour Concentration (ppm) # Days > Federal 8-hour Std. of 0.070 ppm # Days > California 1-hour Std. of 0.09 ppm # Days > California 8-hour Std. of 0.070 ppm	0.114 0.101 55 9 60	0.108 0.090 49 11 52	0.110 0.098 53 11 54
PM_{10} - Hesperia-Olive Street	Max. 24-hour Concentration (µg/m^3) Est. # Days > Fed. 24-hour Std. of 150 µg/m^3 Federal Annual Arithmetic Mean (12 µg/m^3)	426.5 1 28.7	135.0 0 27.2	176.2 1 27.9
$PM_{2.5}$ - Victorville-14306 Park Avenue	Max. 24-hour Concentration (µg/m^3) # Days > Fed. 24-hour Std. of 35 µg/m^3 State Annual Average (12 µg/m^3)	87.1 1 10.2	24.6 0 9.0	25.6 0 7.8
NO_2 – Victorville-14306 Park Avenue	Max. 1-hour Concentration (ppm) State Annual Average (0.030 ppm) # Days > California 1-hour Std. of 0.18 ppm	0.060 0.012 0	0.060 0.012 0	0.060 0.010 0

Source: ARB, 2025.

4.3.4 Air Quality Management Plan (AQMP)

The MDAQMD's jurisdiction comprises most of the MDAB, which encompasses the desert portions of Kern, Los Angeles, Riverside and San Bernardino counties. The MDAQMD is required to produce plans to show how air quality would be improved in the region. The California Clean Air Act (CCAA) requires that these plans be updated triennially to incorporate the most recent available technical information.[6]

The Project is located in the jurisdiction of the MDAQMD. Under the Federal Clean Air Act the MDAQMD has adopted a variety of attainment plans for nonattainment pollutants. The District has primary responsibility for regulating stationary sources of air pollution located within its jurisdictional boundaries. It implements air quality programs required by state and federal mandates, enforces rules and regulations based on air pollution laws and educates businesses and residents about their role in protecting air quality and the risks of air pollution (MDAQMD, 2022).

The 1995 Final Mojave Desert Planning Area, Federal Particulate Matter (PM10) Attainment Plan (MDAQMD, 1995) was adopted by the MDAQMD board on July 31, 1995. A Certification of District Measures to Reduce PM pursuant to former Health & Safety Code §39614(d) was received and filed by the ARB on January 27, 2020 (MDAQMD, 2020a). The 2008 MDAQMD Federal 8-Hour Ozone Attainment Plan (Western Mojave Desert Non-attainment Area) was adopted by the MDAQMD board. The USEPA designated the Western Mojave Desert area as non-attainment for the 8-hour ozone NAAQS pursuant to the provisions of the Federal Clean Air Act (FCAA). A portion of the Mojave Desert Air Quality Management District (MDAQMD) is included in the Western Mojave Desert non-attainment area. The most recent attainment plan that was approved by USEPA is the MDAQMD 2008

6 CCAA of 1988.

Ozone Attainment Plan, which was adopted in 2008. The most recently adopted State plan is the 1996 Triennial Revision to the 1991 Air Quality Attainment Plan (MDAQMD, 2008).

4.3.5 Sensitive Receptors

Some people, such as individuals with respiratory illnesses or impaired lung function because of other illnesses, persons over 65 years of age, and children under 14, are particularly sensitive to certain pollutants. Facilities and structures where these sensitive people live or spend considerable amounts of time are known as sensitive receptors. For the purposes of CEQA analysis, the MDAQMD considers a sensitive receptor to be a receptor such as a residence, schools, daycare centers, playgrounds and medical facilities. The following project types proposed for sites within the specified distance to an existing or planned (zoned) sensitive receptor land use must be evaluated with a health risk assessment (MDAQMD, 2020a, p. 8):

Any industrial project within 1,000 feet.

A distribution center (40 or more trucks per day) within 1,000 feet.

A major transportation project (50,000 or more vehicles per day) within 1,000 feet.

A dry cleaner using perchloroethylene within 500 feet.

A gasoline dispensing facility within 300 feet.

THE PROPOSED PROJECT WOULD DEVELOP A TRANSFER HUB AND A HYDROGEN FUELING STATION. NEITHER PROJECT COMPONENT MEETS THE DEFINITION OF THE PROJECT TYPES ON THE AFOREMENTIONED LIST. THEREFORE, A HEALTH RISK ASSESSMENT IS NOT NEEDED AND WAS NOT PERFORMED.

THE NEAREST SENSITIVE RECEPTOR IS A SINGLE-FAMILY RESIDENCE APPROXIMATELY 78 FEET SOUTH OF THE TRANSFER HUB PROJECT BOUNDARY. TABLE 4.3-3 LISTS THIS AND OTHER SENSITIVE RECEPTORS NEAR THE PROJECT SITE. FIGURE 4.3-1 SHOWS SENSITIVE RECEPTORS IN THE GENERAL PROJECT AREA.

TABLE 4.3-3

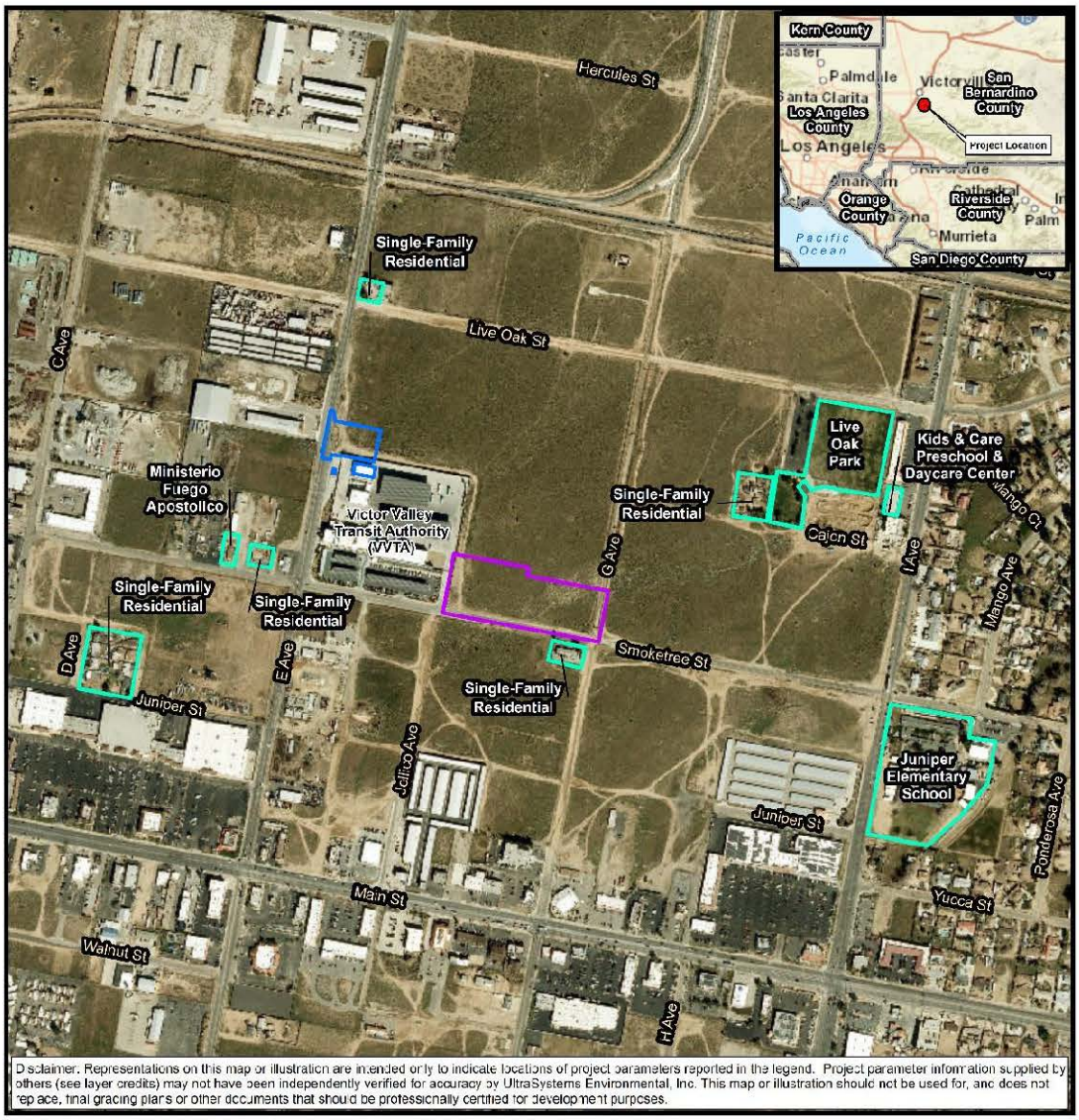
SENSITIVE RECEPTORS NEAR PROJECT BOUNDARIES

S.no.	Sensitive receptor	Address	Distance (feet)	Direction
1	Single-family residence	17223 Smoke Tree St, Hesperia, CA 92345, USA	78	South of Transfer Hub
2	Single-family residence	9709 E Ave, Hesperia, CA 92345, USA	520	North of Hydrogen Fuel Station
3	Single-family residence	16996 Smoke Tree St, Hesperia, CA 92345, USA	662	Southwest of Hydrogen Fuel Station
4	Single-family residence	17344 Cajon St, Hesperia, CA 92345, USA	940	Northeast of Transfer Hub

S.no.	Sensitive receptor	Address	Distance (feet)	Direction
5	Kids & Care Preschool & Daycare Center	9560 I Ave, Hesperia, CA 92345, United States	1,428	East of Transfer Hub
6	Single-family residence	16907 Spruce St, Hesperia, CA 92345, USA	1,534	West Of Transfer Hub
7	Juniper Elementary School	9400 I Ave, Hesperia, CA 92345, United States	1,514	East of Transfer Hub

FIGURE 4.3-1

AIR QUALITY SENSITIVE RECEPTORS



4.3.6 Applicable Mojave Desert Air Quality Management District Rules

Rule 403 (Fugitive Dust Control Rule)

During construction, the project would be subject to MDAQMD Rule 403 (fugitive dust control) (MDAQMD, 2020c). The general requirement prohibits a person from causing or allowing emissions of fugitive dust from construction (or other fugitive dust sources) such that the presence of such dust remains visible in the atmosphere beyond the property line of the emissions source, except during high winds. MDAQMD Rule 403 also prohibits construction activity from causing incremental PM_{10} concentrations to exceed 100 micrograms per cubic meter when determined as the difference between upwind and downwind samples collected on federal reference method samplers at the property line for a minimum of five hours, except during high winds.

Rule 1113 (Architectural Coatings)

Construction of this project will include the application of architectural coatings and be subject to MDAQMD Rule 1113 (Architectural Coatings). Among other applicable entities, Rule 1113 requires anyone who supplies, sells, offers for sale, manufactures, blends or repackages any architectural coating for use within the MDAQMD, as well as any person who applies or solicits the application of any architectural coating within the District, or use coatings that contain VOC less than or equal to the VOC limits specified in Table 1 of the rule**.**

4.3.7 Impact Analysis

a) Would the project conflict with or obstruct the implementation of the applicable air quality plan?

Less than Significant Impact

The proposed project site is located in the City of Hesperia, within the jurisdiction of the MDAQMD. The project is compatible with the general plan land use and zoning discussed in detail in **Section 4.11**. The air quality plans are based upon existing and projected land uses in the planning area. The most recent air quality plan is the MDAQMD Federal 8-Hour Ozone Attainment Plan (Western Mojave Desert Non-attainment Area), which was adopted on June 9, 2008. The project is compatible with the air quality plan.

The MDAQMD has developed criteria in the form of emissions thresholds for determining whether emissions from a project are regionally significant. They are useful for estimating whether a project is likely to result in a violation of the NAAQS and/or whether the project conforms with plans to achieve attainment. **Table 4.3-4** shows MDAQMD CEQA significance thresholds for both construction and operation. A project is considered to have a regional air quality impact if emissions from its construction and/or operational activities exceed the corresponding MDAQMD significance thresholds.

Table 4.3-4
MDAQMD THRESHOLDS OF SIGNIFICANCE FOR CRITERIA POLLUTANTS

Pollutant	Emission Threshold (lbs/day)	Emission Threshold (short tons/year)
Volatile Organic Compounds (VOC)	137	25
Nitrogen Oxides (NO_x)	137	25
Carbon Monoxide (CO)	548	100
Sulfur Oxides (SO_x)	137	25
Particulate Matter (PM_{10})	82	15
Fine Particulate Matter ($PM_{2.5}$)	65	12

Source: MDAQMD, 2020a, Table 6.

Estimated criteria pollutant emissions from the project's onsite and offsite project activities were calculated using the California Emissions Estimator Model (CalEEMod), Version 2022.1.1.29. CalEEMod (CAPCOA, 2023) is a planning tool for estimating emissions related to land use projects.

The construction emissions analysis accounted for construction of a wall around the hydrogen fueling station, while operational emissions did not consider the wall as an emission source. To ensure accuracy, two separate CalEEMod analyses were conducted—one for construction emissions and another for operational emissions. Model-predicted project emissions are compared with applicable thresholds to assess regional air quality impacts. It was also assumed that the construction contractor(s) would comply with all pertinent MDAQMD rules. CalEEMod inputs and detailed results are provided in **Appendix B**.

Table 4.3-5 and **Table 4.3-6** show the project schedule used for the air quality analysis of the Transfer Hub and the Hydrogen Fuel Station, respectively. The proposed project would be built in one phase. For the Transfer Hub, the construction is estimated to take place from October 2025 to August 2026 and for the Hydrogen Fuel Station, the construction schedule is estimated to take place from November 2025 to May 2026. Details for each construction subphase are shown in **Table 4.3-5** and **Table 4.3-6**.

Table 4.3-5
CONSTRUCTION SCHEDULE FOR TRANFER HUB

Construction Subphase	Start Date	End Date
Site Preparation	October 1, 2025	October 30, 2025
Grading	October 31, 2025	November 29, 2025
Utilities Installation	November 30, 2025	February 14, 2026
Building Construction	November 30, 2025	June 30, 2026
Paving	February 15, 2026	August 17, 2026
Landscaping	June 1, 2026	August 1, 2026
Architectural Coating	August 18, 2026	August 31, 2026

Table 4.3-6

CONSTRUCTION SCHEDULE FOR HYDROGEN FUEL STATION

Construction Subphase	Start Date	End Date
Site Preparation	November 3, 2025	November 14, 2025
Grading	November 15, 2025	November 28, 2025
Utilities Installation	November 29, 2025	December 19, 2025
Building Construction	December 20, 2025	March 30, 2026
Paving	March 31, 2026	April 15, 2026
Architectural Coating	April 16, 2026	May 1, 2026

These construction activities would temporarily create emissions of dusts, fumes, equipment exhaust, and other air contaminants. Mobile sources (such as diesel-fueled equipment onsite and traveling to and from the project site) would primarily generate NO_X emissions. The quantity of emissions generated daily would vary, depending on the amount and types of construction activities occurring at the same time.

Table 4.3-7 evaluates the project's construction emissions against MDAQMD significance thresholds in tons per year and **Table 4.3-8** evaluates the construction emissions against thresholds in pounds per day. The project's annual emissions would not exceed Mojave Desert Air Quality Management District annual or daily significance thresholds for any criteria pollutant during construction. Construction of both facilities may sometimes be concurrent; however, the maximum combined construction emissions will not exceed any MDAQMD daily or annual thresholds. Therefore, the project's short-term regional air quality impacts would be less than significant.

Table 4.3-7
MAXIMUM ANNUAL REGIONAL CONSTRUCTION EMISSIONS

Year	Maximum Emissions (short tons/year)				
	ROG	NO_x	CO	PM_{10}	$PM_{2.5}$
Transfer Hub					
Maximum Annual Emissions, 2025	0.11	0.80	0.97	0.04	0.03
Maximum Annual Emissions, 2026	0.43	3.00	3.87	0.18	0.11
Hydrogen Fuel Station					
Maximum Annual Emissions, 2025	0.01	0.11	0.12	0.02	0.01
Maximum Annual Emissions, 2026	0.03	0.17	0.21	0.01	0.01
Combined Emissions					
Maximum Annual Emissions, 2025	0.12	0.91	1.09	0.07	0.04
Maximum Annual Emissions, 2026	0.46	3.16	4.08	0.19	0.12
MDAQMD Significance Thresholds (short tons per year)	*25*	*25*	*100*	*15*	*12*
Significant (Yes or No)	**No**	**No**	**No**	**No**	**No**

Source: Calculated by UltraSystems with CalEEMod (Version 2022.1.1.29) (CAPCOA, 2023).

Table 4.3-8
MAXIMUM DAILY REGIONAL CONSTRUCTION EMISSIONS

Year	Maximum Emissions (lbs/day)

	ROG	NO_x	CO	PM_{10}	$PM_{2.5}$
Transfer Hub					
Maximum Daily Emissions, 2025	4.95	36.72	45.88	2.15	1.38
Maximum Daily Emissions, 2026	5.53	40.92	55.82	2.52	1.50
Hydrogen Fuel Station					
Maximum Daily Emissions, 2025	1.12	10.11	10.47	2.63	1.45
Maximum Daily Emissions, 2026	2.43	4.33	6.65	0.41	0.22
Combined Emissions					
Maximum Daily Emissions, 2025	6.07	46.82	56.35	4.78	2.83
Maximum Daily Emissions, 2026	7.96	45.25	62.47	2.93	1.72
MDAQMD Significance Thresholds	*137*	*137*	*548*	*82*	*65*
Significant (Yes or No)	**No**	**No**	**No**	**No**	**No**

Source: Calculated by UltraSystems with CalEEMod (Version 2022.1.1.29) (CAPCOA, 2023).

Regional Operational Emissions

The project proposes to develop a Transfer Hub and a Hydrogen Fueling Station. Operational emissions generated by area sources, motor vehicles, and stationary sources such as the emergency generator would result from normal day-to-day activities of the project. Project operational criteria pollutant emissions were estimated using CalEEMod, Version 2022.1.1.29 (CAPCOA, 2022). These estimates are summarized in **Table 4.3-9** and **Table 4.3-10**. CalEEMod provides default assumptions regarding operational mobile source emissions based on standard fuel types—primarily gasoline, diesel and natural gas—reflecting regional fleet characteristics derived from EMission FACtor 2021 (EMFAC2021) data. However, CalEEMod does not currently account for hydrogen fuel cell technology in mobile sources.

As noted in the Victor Valley Transit Authority Comprehensive Operations Analysis (COA) Final Report – June 2024 (VVTA, 2024), the project involves a planned transition to zero-emission buses (ZEBs) using hydrogen fuel cell technology. This transition includes the development of hydrogen fueling infrastructure in Barstow and Hesperia and represents a substantial shift from fossil-fuel-based transit operations to a zero-emission alternative. Because CalEEMod does not reflect this fuel substitution, the model's vehicle data defaults were modified.

To account for the project's planned transition to hydrogen fuel cell technology, gasoline and diesel fuel use from buses were removed from the model. Mobile source emissions from the transit hub only considers employee and visitor trips to the project site. Stationary source emissions from the hydrogen fuel facility represents the natural gas fueled emergency backup generator. The results of these operational criteria pollutant emissions calculations are presented in **Table 4.3-9** and **Table 4.3-10**. As seen in the tables, for each criteria pollutant, the operational emissions would be below the pollutant's MDAQMD significance threshold. Therefore, regional operational emissions would be less than significant.

Table 4.3-9
MAXIMUM ANNUAL PROJECT OPERATIONAL EMISSIONS

Operational Emissions	Pollutant (short tons/year)				
	ROG	NO_x	CO	PM_{10}	$PM_{2.5}$
Transfer Hub					
Area Source Emissions	0.05	0.00	0.22	<0.005	<0.005
Mobile Source Emissions	0.01	0.02	0.13	0.03	0.01
Maximum Annual Operational Emissions	**0.06**	**0.02**	**0.35**	**0.03**	**0.01**
Hydrogen Fuel Station					
Area Source Emissions	0.03	<0.005	0.03	<0.005	<0.005
Stationary Source Emissions	0.13	0.012	0.327	<0.005	<0.005
Maximum Annual Operational Emissions	**0.16**	**0.01**	**0.36**	**0.00**	**0.00**
Combined Emissions					
Area Source Emissions	0.08	<0.005	0.25	<0.005	<0.005
Stationary Source Emissions	0.13	0.012	0.327	<0.005	<0.005
Mobile Source Emissions	0.01	0.02	0.13	0.03	0.01
Maximum Annual Operational Emissions	**0.22**	**0.032**	**0.707**	**0.03**	**0.01**
MDAQMD Significance Thresholds (short tons per year)	*25*	*25*	*100*	*15*	*12*
Significant? (Yes or No)	**No**	**No**	**No**	**No**	**No**

Source: Calculated by UltraSystems with CalEEMod (Version 2022.1.1.29) (CAPCOA, 2023).

Table 4.3-10
MAXIMUM DAILY PROJECT OPERATIONAL EMISSIONS

Operational Emissions	Pollutant (lbs/day)				
	ROG	NO_x	CO	PM_{10}	$PM_{2.5}$
Transfer Hub					
Area Source Emissions	0.42	0.02	2.21	<0.005	<0.005
Mobile Source Emissions	0.09	0.12	1.03	0.21	0.05
Total Operational Emissions	**0.51**	**0.14**	**3.24**	**0.21**	**0.05**
Hydrogen Fuel Station					
Area Source Emissions	0.18	<0.005	0.26	<0.005	<0.005
Stationary Source Emissions	5.02	0.48	13.08	0.03	0.03
Total Operational Emissions	**5.2**	**0.48**	**13.34**	**0.03**	**0.03**
Combined Emissions					
Area Source Emissions	0.60	0.02	2.47	<0.005	<0.005
Stationary Source Emissions	5.02	0.48	13.08	0.03	0.03
Mobile Source Emissions	0.09	0.12	1.03	0.21	0.05
Total Operational Emissions	**5.71**	**0.62**	**16.58**	**0.24**	**0.08**

Operational Emissions	Pollutant (lbs/day)				
	ROG	NO_x	CO	PM_{10}	$PM_{2.5}$
MDAQMD Significance Thresholds	*137*	*137*	*548*	*82*	*65*
Significant? (Yes or No)	**No**	**No**	**No**	**No**	**No**

Source: Calculated by UltraSystems with CalEEMod (Version 2022.1.1.29) (CAPCOA, 2023).

b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less Than Significant Impact

Since the MDAB is currently in federal nonattainment for ozone and $PM_{2.5}$ and state nonattainment for ozone and PM_{10}, related projects may exceed an air quality standard or contribute to an existing or projected air quality exceedance. However, as discussed above, the mass daily and annual construction and operational emissions generated by the project would not exceed any of the MDAQMD's significance thresholds. Therefore, the project would not contribute a cumulatively considerable increase in emissions of the pollutants for which the MDAB is in nonattainment. The cumulative air quality impacts associated with the project would be less than significant.

c) Would the project expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact

Construction of the project would generate short-term and intermittent emissions. Following the MDAQMD's CEQA Guidelines (MDAQMD, 2020a), residences, schools, daycare centers, playgrounds, and medical facilities are considered sensitive land uses. The nearest sensitive receptor is a single-family residence approximately 78 feet south of the Transfer Hub Project boundary. However, as discussed in **Section 4.3.5** above the proposed project in its entirety does not meet the MDAQMD criteria for requiring a health risk assessment. Therefore, project pollutant emissions will have a less than significant impact on sensitive receptors and no mitigation is required.

d) Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less than Significant Impact

A project-related significant adverse effect could occur if the construction or operation of the proposed project results in the generation of odors that are perceptible in adjacent sensitive areas. Construction-related sources of odors will come from construction equipment ranging from exhaust fumes to grease and oils. Impacts from construction-generated odors can depend upon the source, frequency of the generation of the odor, intensity, wind direction, and receptor sensitivity. The impacts from odors would be temporary and will occur only during construction. The short-term odors that would be generated by the equipment would dissipate. Land uses and industrial operations that are typically associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The project does not include any of those types of land uses as part of its operations. Therefore, impacts would be less than significant.

4.4 Biological Resources

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?		**X**		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?				**X**
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				**X**
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native nursery sites?		**X**		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?		**X**		
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				**X**

Information from the following reports was used to prepare this section. These documents are included in **Appendix C**.

- *Victor Valley Transit Authority, Hydrogen Fueling Station Project, Biological Resources Technical Memorandum (Appendix 4)* prepared by AECOM on December 7, 2021 (AECOM, 2021). See **Appendix C1.**

- *Results of a Western Joshua Tree Census for the Victor Valley Transit Authority Hydrogen Fueling Station site located in the city of Hesperia, San Bernardino County, California* prepared by Hernandez Environmental Services (HES) on April 28, 2025 (HES, 2025a). See **Appendix C1.**

- *General Biological Assessment for the Victor Valley Transit Authority Hesperia Transfer Hub project site (Assessor's Parcel Number 0410-121-05) located within the City of Hesperia, San Bernardino County, California* prepared by Hernandez Environmental Services (HES) on May 9, 2025 (HES, 2025b). See **Appendix C2.**

- *Western Joshua Tree Census, Hesperia, California* (Draft), Project No: RCA#2024-147 JT, prepared by RCA Associates, Inc. (RCA), December 5, 2024, (Updated January 3, 2025) (RCA, 2024). See **Appendix C2.**

4.4.1 Methods

4.4.1.1 Literature Review

A search of relevant regional databases for special-status biological resources in the vicinity of the project area was conducted prior to conducting a field survey. The U.S. Fish and Wildlife Service's (USFWS) online Information for Planning and Consultation (IPaC) environmental review process was queried for federally listed plant and wildlife species, sensitive natural communities, and protected areas known from the project vicinity. A search of the Hesperia quad and the surrounding eight Geological Survey (USGS) quadrangles, including Adelanto, Victorville, Apple Valley North, Apple Valley South, Lake Arrowhead, Silverwood Lake, Cajon, and Baldy Mesa quadrangles was made of the California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB) and of the California Native Plant Society's (CNPS) on-line Inventory of Rare and Endangered Plants of California to identify special-status species and sensitive habitats known from the project region (AECOM, 2021; HES, 2025b).

Hydrogen Fueling Station

Plant Species

A total of 55 plant species were identified from a search of IPaC for the project vicinity and the CNDDB and CNPS database searches to have historically been recorded from Hesperia and surrounding eight quadrangles. Identified species included two federally and/or State-listed species, Mojave tarplant (*Deinandra mohavensis*; state-listed Endangered) and Parish's daisy (*Erigeron parishii*; federally listed Endangered). All 55 special-status plant species identified during the database reviews, their status, habitat requirements, and potential to occur on-site are provided in Table A of the biological report in **Appendix C1** (AECOM, 2021).

Wildlife Species

A total of 50 wildlife species were identified from a search of IPaC for the project vicinity and from a CNDDB search of the Hesperia and surrounding eight quadrangles. The 50 special-status wildlife species identified during the database reviews, their status, and habitat requirements are provided in Table B of the biological report in **Appendix C1** (AECOM, 2021).

Hesperia Transfer Hub

Plant Species

A total of 26 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 Plant Inventory; or have been found to have a potential to occur on the project site. Based upon the literature review, seven of these sensitive plant species were determined to have a potential to be present on the project site (HES, 2025b). Sensitive plant species and their potential to occur within the project area are listed in Appendix B of the biological report included in **Appendix C2**.

Wildlife Species

A total of 49 wildlife species that 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 the Hesperia USGS quadrangle and eight surrounding USGS quads were reviewed, and a complete list of those species are discussed within Appendix B. Based upon the literature review, 19 of these sensitive wildlife species were determined to have a potential to be present on the project site (HES, 2025b). Sensitive wildlife species and their potential to occur within the project area are listed in Appendix B of the biological report included in **Appendix C2**.

Listed Species Updates

The list of species in the biological report prepared by HES on May 9, 2025 (HES, 2025b) is more recent and applies to both the project sites. Since the 2021 report by AECOM, the Burrowing owl (*Athene cunicularia*) listing status changed to state listed Candidate Endangered Species and a CDFW Species of Special Concern.

4.4.1.2 Field Surveys

Field surveys were conducted as follows:

- Hydrogen Fueling Station: The Biological Survey Area (BSA) included the site and 500-foot (ft) buffer on September 15, 2021, by AECOM to document existing biological resources that occur or have the potential to occur within the project site and to evaluate the potential for special-status plant and wildlife species to occur within the BSA. The biologist walked north-south transects across the entire project site, providing 100 percent visual coverage of the ground surface. Binoculars were utilized to scan for existing conditions and evidence of wildlife activity in the surrounding survey buffer from the project site. Seasonal, species-specific botanical or wildlife surveys were not conducted as part of this evaluation (AECOM, 2021).

- Hydrogen Fueling Station: A focused Western Joshua Tree (WJT) survey of the project site and 50-ft buffer (the BSA) was conducted by Hernandez Environmental Services on March 13, 2025. All WJTs in the BSA were mapped using a sub-meter Geographical Positioning System (GPS). A photograph of each tree was taken. Each WJT was measured and documented (HES, 2025a).

- Hesperia Transfer Hub: On March 13, 2025, HES conducted a biological field survey of the Hesperia Transfer Hub site. The purpose of the survey was to document existing habitat

conditions, plant and animal species information, view the surrounding uses, assess the potential for state and federal waters, assess the potential for wildlife movement corridors, and assess the presence of critical habitat constituent elements (HES, 2025b).

- A WJT survey of the Hesperia Transfer Hub site and 50-ft buffer was conducted by RCA Associates, Inc. on November 14, 2024. All WJTs on the site were mapped, measured, documented, and photographed (RCA Associates, Inc., 2024).

4.4.2 Environmental Setting

4.4.2.1 Hydrogen Fueling Station

The project site consists of vacant land dominated by creosote scrub habitat. The site is relatively flat with elevations on the project site ranging from 3,149 feet above mean sea level (amsl) to 3,155 feet amsl. The USDA soils at the project site are classified as Bryman loamy fine sand (106), 2 to 5 percent slopes. The project site is bordered by industrial development to the west and south and open vacant land to the east and north (HES, 2025a).

Based on the 2021 survey, the site is a mix of bare ground and a cover of non-native grasses, with occasional native desert shrub species. Disturbances from off-road vehicles are evident by the presence of tire tracks throughout the site but mostly along the western portion of the site along E Avenue. Occasional burrows suitable for small fossorial mammals are present within the project site; however, no burrows exhibit sign of recent activity (AECOM, 2021).

The 500-foot buffer contains roadways (i.e. Live Oak Street and E Avenue), buildings and associated paved or bare ground areas, and areas with similar habitat to the project site. Development is located to the south and east of the project site, with non-native grass cover and occasional native desert scrub species present to the north and west (see Figure 2 and Attachment B in **Appendix C1**) (AECOM, 2021).

Plant Species and Habitats

Vegetative cover is generally sparse on-site and no native plant communities are present. Vegetation on-site includes primarily non-native grass species including ripgut brome (*Bromus diandrus*) and Bermuda grass (*Cynodon dactylon*), with occasional native desert scrub species, such as California buckwheat (*Eriogonum fasciculatum*), California juniper (*Juniperus californica*), and creosote bush (*Larrea tridentata*) present. One Joshua tree (*Yucca brevifolia*) was documented within the southern portion of the site, with additional Joshua trees in close proximity of the northern and western perimeter of the project site. Plant species recorded during the field survey within the project site are provided in Table A and Attachment B in **Appendix C1** (AECOM, 2021).

During the 2021 survey, one Joshua tree, a Candidate species for State-listing as Threatened under CESA, was recorded within the project site during the field survey, with additional Joshua trees within close proximity of the northern and western perimeter of the project site. No other special-status plant species were detected during the field survey. One CNDDB record of a special-status plant species, white pygmy-poppy (*Canbya candida*; CRPR 4.2), coincides with the BSA. The record of this non-listed species is from 1958 and the species was not observed during the field survey. Suitable habitats (described in Table A in **Appendix C1**) for the regional special-status plant species identified during the database searches are absent from the BSA and special-status plant species, beyond the Joshua trees identified on-site, are not expected to occur within the BSA (AECOM, 2021).

A focused WJT survey of the project site and 50-ft buffer was conducted by Hernandez Environmental Services on March 13, 2025 (HES, 2025a). Two WJTs were documented within the project boundary as live trees, but one was in poor condition. No WJT were documented within the 50-foot buffer. The WJT locations are displayed on **Figure 4.4-1,** *Joshua Tree Location Map – Hydrogen Fueling Station*. The WJT Census Table, which is included as Appendix A of the WJT census report in **Appendix C1,** contains all other data collected on the WJT documented within the project area including the tree height and health (HES, 2025a).

Sensitive communities include habitats of natural vegetation that are recognized, designated, and/or managed as rare in the region by federal and/or state agencies; support special-status plant or wildlife species, or receive regulatory protection (i.e., Section 404 of the Clean Water Act (CWA) and/or Sections 1600 et seq. of the CFGC). No sensitive natural vegetation communities occur within the BSA. Vegetation consists primarily of non-native grasses with occasional desert scrub species. No USFWS-designated Critical Habitat for federally listed plant or wildlife species coincides with the BSA. The nearest Critical Habitat occurs approximately four miles northeast of the BSA for southwestern willow flycatcher along the Mohave River and five miles to the southeast along the Mohave River for arroyo toad (AECOM, 2021).

Jurisdictional Areas

An online review of the USFWS's National Wetlands Inventory (NWI) was also conducted to identify potential wetlands and surface water features on-site which may be protected under the Clean Water Act (CWA) and/or Section 1600 of the California Fish and Game Code (CFGC). The results of the database review showed no NWI features within the BSA and none were identified to occur on-site during the field survey (AECOM, 2021).

Wildlife Species

Wildlife species observed during the field survey included seven bird species, three mammal species, and two reptile species that are common in the project area. The generally sparse vegetative cover on-site limits the site's suitability for bird activity; however, existing vegetation within the project site does provide some cover, resting, and nesting habitat for bird species. Wildlife species observed during the field survey within the BSA are provided in Table B in **Appendix C1** (AECOM, 2021).

No special-status wildlife species were detected during the field survey. CNDDB records of two special-status wildlife species, Mohave ground squirrel and coast horned lizard (*Phrynosoma blainvillii*; CDFW SSC) coincide with the BSA; however, both records are over 100 years old. No burrows suitable for Mohave ground squirrel were identified on-site and habitat for coast horned lizard is marginal. Suitable habitats (described in Table B in **Appendix C1**) for the regional special-status wildlife species identified during the database searches are absent or of marginal quality within the BSA (AECOM, 2021).

Some special-status bird species may fly over or briefly rest within the BSA as migrating or foraging transients; however, they are generally not expected to nest within the BSA. Burrows potentially suitable for nesting by burrowing owl (*Athene cunicularia*; CDFW SSC) were identified on-site, and the open grassland habitat occurring within the project site is preferred by this species; however, no sign of recent use by burrowing owl or any other wildlife was evident at the burrows on-site, and burrowing owl is not considered to occur on-site (AECOM, 2021).

Figure 4.4–1
JOSHUA TREE LOCATION MAP -HYDROGEN FUELING STATION

Sources: Hernandez Environmental Services (HES), April 28, 2025

UltraSystems
environmental•management•planning

VVTA Hydrogen Fueling Station and Hesperia Transfer Hub

Hydrogen Fueling Station
Joshua Tree Location Map

4.4.2.2 Hesperia Transfer Hub

The project site is vacant and appears to be disturbed by off-road vehicle use. The project site is relatively flat with elevations ranging from 3,126 feet amsl to 3,152 feet amsl. Surrounding land uses include an existing VVTA facility to the immediate west, vacant lands to the north and east, and residential uses to the south. Hesperia Avenue is immediately adjacent to the southern project site boundary. Soils at the project site are classified as Bryman loamy fine sand (105), 0 to 2 percent slopes, and Bryman loamy fine sand (106), 2 to 5 percent slopes (HES, 2025b).

Plant Species and Habitats

The project site consists of approximately 4.73 acres of Nevada joint fir scrub habitat. This habitat type is characterized by Joshua trees (*Yucca brevifolia*), cheat grass (*Bromus tectorum*), cholla (*Cylindropuntia* sp.), Nevada ephedra (*Ephedra nevadensis*), turpentine bush (*Ericameria laricifolia*), rubber rabbitbrush (*Ericameria nauseosa*), bastardsage (*Eriogonum wrightii*), and creosote (*Larrea tridentata*) (HES, 2025b).

Based upon the field surveys, the following sensitive plant species have a potential to be present on the project site (but were not observed): White pygmy-poppy (*Canbya candida*) is ranked 4.2 in the CNPS Rare Plant Inventory; White-bracted spineflower (*Chorizanthe xanti* var. *leucotheca*), ranked 1B.2; Booth's evening-primrose (*Eremothera boothii* ssp. *boothii*), ranked 2B.3; and Beaver Dam breadroot (*Pediomelum castoreum*) is ranked 1B.2. Western Joshua tree (*Yucca brevilfolia*), listed as a state Candidate Species, is present on the site (HES, 2025b).

A focused WJT survey of the Hesperia Transfer Hub site and 50-ft buffer was conducted by RCA Associates, Inc. on November 14, 2024. All WJTs on the site were mapped, measured, documented, and photographed. A total of 30 Joshua trees were documented within the project site and one Joshua tree occur within a 50-foot buffer. Only 19 of the onsite trees and the one offsite tree were alive and the remaining 11 trees onsite were dead. The WJT locations are displayed on **Figures 4.4-2 and 4.4-3**. The WJT Census Table is included in the WJT census report in **Appendix C2** and contains all other data collected on the WJT documented within the project area including the tree height and health (RCA Associates, Inc., 2024).

No riparian habitat is present within the BSA. No sensitive natural vegetation communities occur within the BSA. Vegetation consists primarily of non-native grasses with occasional desert scrub species. No USFWS-designated Critical Habitat for federally listed plant or wildlife species is located near the BSA (HES, 2025b).

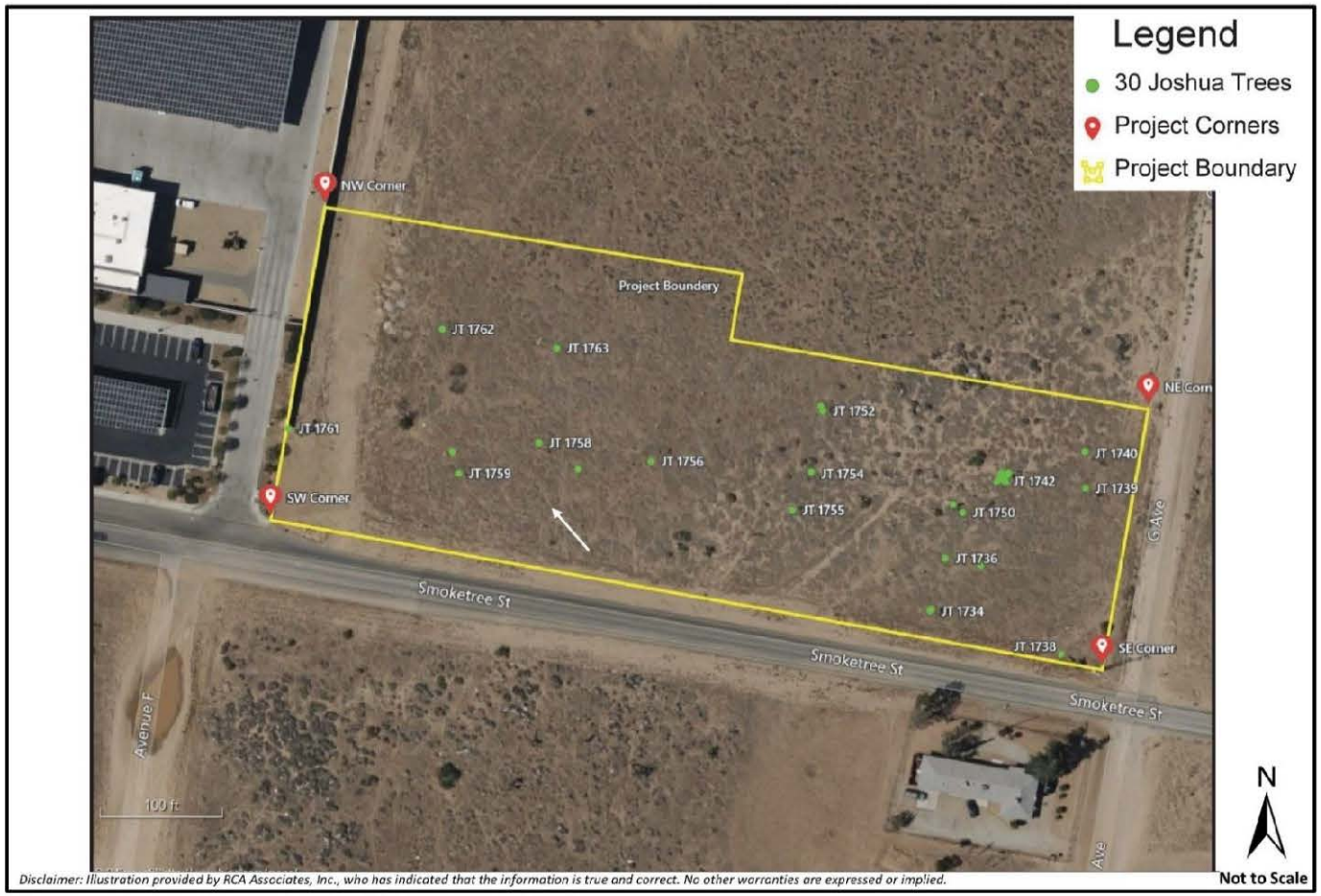
Jurisdictional Areas

The project site does not contain waters or wetlands that would fall under the jurisdiction of state and federal agencies such as the CDFW, the Regional Water Quality Control Board (RWQCB), or the United States Army Corps of Engineers (USACE) (HES, 2025b).

Wildlife Species

General wildlife species documented on the project site or within the vicinity of the site include coyote (*Canis latrans*), American crow (*Corvus brachyrhynchos),* California ground squirrel (*Otospermophilus beecheyi*), desert cottontail (*Sylvilagus audubonii*), and common raven (*Corvus corax*). The complete list of species observed is included in the report in **Appendix C2**. Based on the survey, the following special status species have the potential to occur on the project site:

Figure 4.4–2
JOSHUA TREE LOCATION MAP -HESPERIA TRANSFER HUB (1 OF 2)



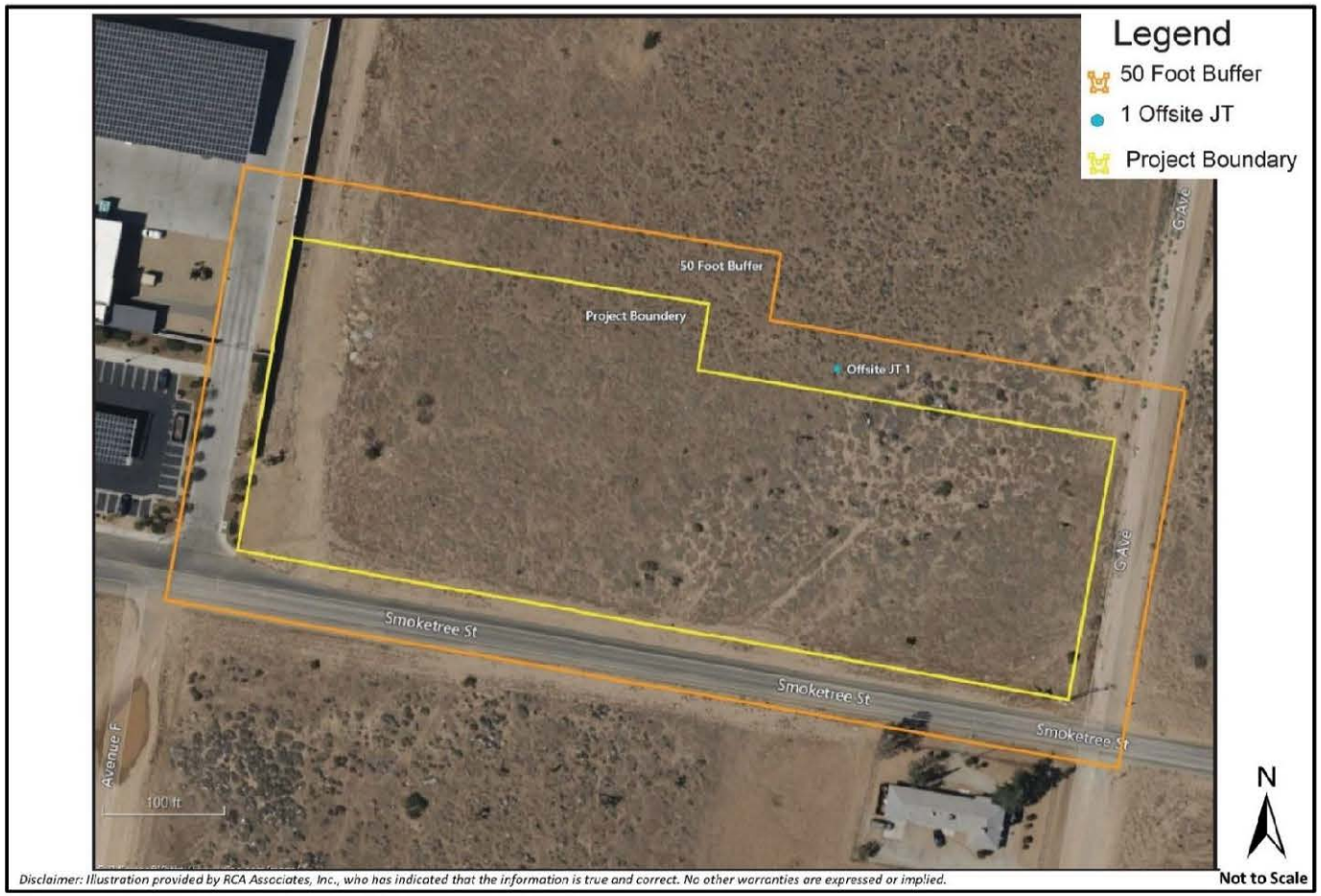
Source: RCA Associates, Inc., December 5, 2024 (Updated January 3, 2025).

UltraSystems
environmental • management • planning

VVTA Hydrogen Fueling Station and Hesperia Transfer Hub

Hesperia Transfer Hub
Joshua Tree Location Map (1of 2)

Figure 4.4–3
JOSHUA TREE LOCATION MAP -HESPERIA TRANSFER HUB (2 OF 2)



Source: RCA Associates, Inc., December 5, 2024 (Updated January 3, 2025).

UltraSystems
environmental•management•planning

VVTA Hydrogen Fueling Station and Hesperia Transfer Hub

Hesperia Transfer Hub
Joshua Tree Location Map (2 of 2)

Burrowing owl (*Athene cunicularia*) is a state listed Candidate Endangered Species and a CDFW Species of Special Concern; Loggerhead shrike (*Lanius ludovicianus*) is a CDFW Species of Special Concern; the Mohave ground squirrel (*Xerospermophilus mohavensis*) is a state listed Threatened Species. 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 15 (HES, 2025b).

The project site is not located within a designated wildlife corridor or linkage. The project site is relatively flat and does not contain mountain canyons or riparian corridors nearby. Furthermore, the site is surrounded by urban development, including an existing VVTA facility to the west and a busy roadway and residential uses to the south. Although open, vacant lands exist to the north and east, urban development is present beyond in the form of industrial uses. No wildlife movement corridors were found to be present on or within the vicinity of the project site (HES, 2025b).

4.4.3 Discussion of Impacts

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

Less Than Significant with Mitigation Incorporated

Hydrogen Fueling Station

The site is a mix of bare ground and a cover of non-native grasses, with occasional native desert shrub species. Disturbances from off-road vehicles are evident by the presence of tire tracks throughout the site but mostly along the western portion of the site along E Avenue. Occasional burrows suitable for small fossorial mammals are present within the project site; however, no burrows exhibit sign of recent activity (AECOM, 2021).

Vegetative cover is generally sparse on-site and no native plant communities are present. No sensitive natural vegetation communities occur within the BSA. Vegetation consists primarily of non-native grasses with occasional desert scrub species. No USFWS-designated Critical Habitat for federally listed plant or wildlife species coincides with the BSA. Suitable habitats (described in Table A in **Appendix C1**) for the regional special-status plant species identified during the database searches are absent from the BSA and special-status plant species, beyond the Joshua trees identified on-site, are not expected to occur within the BSA. Two WJT were documented within the project boundary; both were alive but one was documented as in poor health. No WJTs were documented within the 50-foot buffer.

No special-status wildlife species were detected during the field survey. No burrows suitable for Mohave ground squirrel were identified on-site, and habitat for coast horned lizard is marginal. Suitable habitats (described in Table B in **Appendix C1**) for the regional special-status wildlife species identified during the database searches are absent or of marginal quality within the BSA (AECOM, 2021). Burrows potentially suitable for nesting by burrowing owl (*Athene cunicularia*; CDFW SSC) were identified on-site and the open grassland habitat occurring within the project site is preferred by this species; however, no sign of recent use by burrowing owl or any other wildlife was evident at the burrows on-site and burrowing owl is not considered to occur on-site (AECOM, 2021).

Construction of the proposed project would result in the removal of Joshua trees, a Candidate species for listing under CESA, and potential impacts to nesting birds protected under the MBTA and/or CFGC Section 3503, which may nest within the BSA. Joshua trees, the occasional native desert scrub species, and ground surfaces occurring within the BSA provide marginal opportunities for bird nesting. As a result, birds protected by the MBTA and by the CFGC have the potential to nest in the BSA. Vegetation removal and ground disturbance would occur during project implementation, potentially impacting any birds that may be nesting on-site. Additionally, indirect impacts to birds that may nest within the BSA could occur during construction as a result of noise, dust, and increased human presence. Such disturbances could result in increased nesting mortality due to nest abandonment or decreased feeding frequency and would be considered a significant impact. However, by implementing standard construction mitigation measures (MMs) **BIO-1** through **BIO-6,** including conducting pre-construction nesting bird surveys and providing qualified biological monitors during construction as necessary, impacts to nesting birds protected under the MBTA and/or the CFGC would be reduced to less than significant levels.

In September 2020, California Fish and Game Commission provided notice and accepted a petition to list Joshua tree as a Candidate threatened species under CESA. Unlike the FESA, which only covers species once they are listed, CESA protects Candidate species being considered for listing as threatened or endangered. CESA prohibits "take" of the species without authorization from CDFW via an Incidental Take Permit (ITP) pursuant to Section 2081 of CFGC. On July 10, 2023, the WJT Conservation Act (WJTCA) was passed to conserve WJT and its habitat while supporting the state's renewable energy and housing priorities. The WJTCA prohibits the importation, export, take, possession, purchase, or sale of any WJT in California unless authorized by the CDFW. It is anticipated that impacts to Joshua tree would require an ITP from CDFW, which would also identify the compensatory mitigation that would be required for the removal of Joshua trees during project implementation. The Joshua Tree ITP is included as **MM BIO-7**. The CDFW requires mitigation fees to be paid for removal of Joshua trees (both dead and alive) in lieu of traditional permittee mitigation (CDFW, 2025a). According to the CDFW mitigation fees map, the project site is located outside of the reduced fee area, so standard fees would apply to this project (CDFW, 2025b). **Table 4.4-1** shows the current standard mitigation fees (CDFW, 2025c). **Table 4.4-2** shows the WJT tree size class and estimated mitigation fee for the Hydrogen Fueling Station site.

Table 4.4-1
CDFW WJT STANDARD MITIGATION FEES

Tree Size Class	Mitigation Fee
(A) Trees less than 1 meter in height	$346.00
(B) Trees 1 meter or greater but less than 5 meters in height	$509.00
(C) Trees 5 meters or greater in height	$2,544.75

Sources: CDFW, 2025a, 2025b and 2025c.

Table 4.4-2
WJT TREE SIZE CLASS & MITIGATION FEE (HYDROGEN FUELING STATION)

Standard Mitigation Fees (anywhere in state, outside blue area) [See Section 1927.3 (e)][1]	Number of trees per Size Class A, B or C (On-site)	Number of trees per Size Class A, B or C (Off-site)	Approximate Cost per Size Class (A, B or C)
(A) Trees less than 1 meter in height -$346.00	0	0	$0.00
(B) Trees 1 meter or greater but less than 5 meters in height -$509.00	2	0	$1,018.00
(C) Trees 5 meters or greater in height -$2,544.75	0	0	$0.00
Total number of trees	2 (On-site)	0 (Offsite)	2 (Total)
Approximate mitigation cost	$1,018.00 (On-site)	$0.00 (Offsite)	$1,018.00 (Total)

Sources: HES, 2025a.
[1] Western Joshua Tree Conservation Act Mitigation Fee Map (CDFW, 2025b). https://experience.arcgis.com/experience/40690ac231124bccb07cbce42fc95ebd/

Hesperia Transfer Hub

The Hesperia Transfer Hub site consists of Nevada joint fir scrub habitat. According to the field survey conducted by HES on May 9, 2025 (HES, 2025b) (See **Appendix C2**), the following four special status plant species have the potential to occur on the project site: White Pygmy Poppy, White-bracted Spineflower, Booth's Evening Primrose, Beaver Dam Breadroot. Construction of the transfer hub could impact these species through grubbing and clearing activities. To reduce potential impacts to these species, focused plant surveys as presented in **MM BIO-8** should be conducted during the appropriate blooming period to determine the presence or absence of sensitive plant species.

The following four special status wildlife species have the potential to occur on the project site: Burrowing owl (*Athene cunicularia*) is a state listed Candidate Endangered Species and a CDFW Species of Special Concern; Loggerhead shrike (*Lanius ludovicianus*) is a CDFW Species of Special Concern; the Mohave ground squirrel (*Xerospermophilus mohavensis*) is a state listed Threatened Species. 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 15 (HES, 2025b). These species could potentially be impacted during construction activities. Implementation of **MMs BIO-1** through **BIO-6** and **MM BIO-9** will reduce potential impacts to these species to less than significant.

A total of 30 Joshua trees were documented within the Hesperia Transfer Hub project site boundary and one additional Joshua tree within a 50-foot buffer surrounding the site (see **Figures 4.4-2 and 4.4-3**). Only 19 of the onsite trees and the one offsite tree were alive and the remaining 11 trees onsite were dead (RCA Associates, Inc., 2024). **Table 4.4-3** shows the WJT tree size class and estimated mitigation fee for the Hesperia Transfer Hub site.

Table 4.4-3
WJT TREE SIZE CLASS & MITIGATION FEE (HESPERIA TRANSFER HUB)

Standard Mitigation Fees (anywhere in state, outside blue area) [See Section 1927.3 (e)][1]	Number of trees per Size Class A, B or C (On-site)	Number of trees per Size Class A, B or C (Off-site)	Approximate Cost per Size Class (A, B or C)
(A) Trees less than 1 meter in height -$346.00	14	0	$4,844.00
(B) Trees 1 meter or greater but less than 5 meters in height - $509.00	14	1	$7,635.00
(C) Trees 5 meters or greater in height -$2,544.75	2	0	$5,089.50
Total number of trees	30 (On-site)	1 (Offsite)	31 (Total)
Approximate mitigation cost	$17,059.50 (On-site)	$509.00 (Offsite)	$17,568.50 (Total)

Sources: RCA, 2024.
[1] Western Joshua Tree Conservation Act Mitigation Fee Map (CDFW, 2025b). https://experience.arcgis.com/experience/40690ac231124bccb07cbce42fc95ebd/

Direct and indirect impacts to western Joshua tree would occur as a result of project construction. Therefore, acquisition of a California Fish and Game Code (FGC) § 2081 ITP, included as **MM BIO-7**, will be required. The ITP may require on- or offsite mitigation, as well as a monitoring plan or mitigation fees to be paid to the CDFW. Additionally, mitigation will be required to maintain compliance with the native desert vegetation protection as provided in the City of Hesperia Municipal Code. Implementation of these mitigation measures will reduce impacts to WJT to less than significant.

Mitigation Measures

MM BIO-1: Pre-Construction General Wildlife Survey

Special-status wildlife species that have no designated status under the ESA or the CESA but are designated as sensitive or locally important by federal agencies, state agencies, local agencies, and nonprofit resource organizations, are also considered sensitive in this section. The following measures will be implemented to minimize impacts to these species. The measures below will help to reduce direct and indirect impacts caused by construction on various sensitive species to less than significant levels.

- A qualified biologist shall conduct a pre-construction general wildlife survey for sensitive wildlife and potential nesting sites such as open ground, shrubs, and burrows within the limits of project disturbance. The survey shall be conducted at least seven days prior to the onset of scheduled activities, such as mobilization and staging. It will end no more than three days prior to vegetation, substrate, and structure removal and/or disturbance.

- If sensitive species and/or active nesting sites are not observed during the pre-construction survey or they are observed and will not be impacted, project activities may begin and no further mitigation will be required.

- If any sensitive wildlife species are observed within the project site during the pre-construction survey, the biologist shall immediately map the area and notify the appropriate resource agency to determine suitable protection measures and/or mitigation measures and to determine if additional surveys or focused protocol surveys are necessary. Project activities may begin within the area only when concurrence is received from the appropriate resource agency.

- Sensitive wildlife species and/or potential nesting sites shall not be disturbed, captured, handled or moved.

MM BIO-2: Pre-Construction Breeding Bird Survey

To maintain compliance with the Migratory Bird Treaty Act (MBTA) and Fish and Game Code, and to avoid impacts or take of migratory non-game breeding birds, their nests, young, and eggs, the following measures shall be implemented. The measures below will help to reduce direct and indirect impacts caused by construction on migratory non-game breeding birds to less than significant levels.

- Project activities that will remove or disturb potential nest sites, such as open ground, trees, shrubs, grasses, or burrows, during the breeding season would be a potential significant impact if migratory non-game breeding birds are present. Project activities that will remove or disturb potential nest sites shall be scheduled outside the breeding bird season to avoid potential direct impacts to migratory non-game breeding birds protected by the MBTA and Fish and Game Code. The breeding bird nesting season is typically from February 1 through September 15, but can vary slightly from year to year, usually depending on weather conditions. Removing all physical features that could potentially serve as nest sites will also help to prevent birds from nesting within the project site during the breeding season and during construction activities.

- If project activities cannot be avoided during February 1 through September 15, a qualified biologist shall conduct a pre-construction breeding bird survey for breeding birds and active nests or potential nesting sites within the limits of project disturbance. The survey shall be conducted at least seven days prior to the onset of scheduled activities, such as mobilization and staging. It shall end no more than three days prior to vegetation, substrate, and structure removal and/or disturbance.

- If no breeding birds or active nests are observed during the pre-construction survey or they are observed and will not be impacted, project activities may begin and no further mitigation will be required.

- If a breeding bird territory or an active bird nest is located during the pre-construction survey and will potentially be impacted, the site shall be mapped on engineering drawings and a no activity buffer zone shall be marked (fencing, stakes, flagging, orange snow fencing, etc.) a minimum of 100 feet in all directions or 500 feet in all directions for listed bird species and all raptors. The biologist shall determine the appropriate buffer size based on the type of activities planned near the nest and the type of bird that created the nest. Some bird species are more tolerant than others of noise and activities occurring near their nest. This no-activity buffer zone shall not be disturbed until a qualified biologist has determined that the nest is inactive, the young have fledged, the young are no longer being fed by the parents, the young have left the area, or the young will no longer be impacted by project activities. Periodic

monitoring by a biologist shall be performed to determine when nesting is complete. Once the nesting cycle has finished, project activities may begin within the buffer zone.

- If listed bird species are observed within the project site during the pre-construction survey, the biologist shall immediately map the area and notify the appropriate resource agency to determine suitable protection measures and/or mitigation measures and to determine if additional surveys or focused protocol surveys are necessary. Project activities may begin within the area only when concurrence is received from the appropriate resource agency.

- Birds or their active nests shall not be disturbed, captured, handled or moved. Active nests cannot be removed or disturbed; however, nests can be removed or disturbed if determined inactive by a qualified biologist.

MM BIO-3: Focused Burrowing Owl Survey

Although BUOW was not observed on site during the general wildlife survey, the BSA contains suitable habitat to potentially support BUOW in the future. A qualified biologist shall conduct a focused BUOW survey in accordance with the *Staff Report on Burrowing Owl Mitigation* (CDFW, 2012).

- Following the completion of the survey, the biologist shall prepare a letter report summarizing the results of the survey. The report shall be submitted to VVTA prior to initiating any ground disturbance activities.

- If no BUOWs or signs of BUOW are observed during the survey and concurrence is received from CDFW, project activities may begin, and no further mitigation shall be required.

- If BUOW or signs of BUOW are observed during the survey, the site will be considered occupied. The biologist shall contact VVTA, City of Hesperia, and CDFW to assist in the development of avoidance, minimization, and mitigation measures, prior to commencing project activities. The list of potential measures to avoid and minimize impacts to BUOWs described below shall be implemented.

    - **BUOW Protection Measures.** If BUOWs or signs of BUOW are observed during the survey, then the site shall be considered occupied and the biologist shall contact VVTA, City, and CDFW to assist in the development of avoidance, minimization, and mitigation measures discussed below, prior to commencing project activities.). If no BUOW or signs of BUOW are observed during the focused surveys, the components of this measure (discussed below) would not be applicable.

    - **Planning BUOW Protection.** Grading, construction, and other project activities on all grassland habitat shall be delayed until the qualified biologist has implemented burrow exclusion and closure. No ground-disturbing activities within 165 feet of an active BUOW burrow will be permitted until burrow exclusion and closure have been implemented. No destruction of foraging habitat shall be permitted until burrow exclusion and closure have been implemented.

    - **Preconstruction BUOW Protection.** Prior to the initiation of grading and construction activities, the biologist shall implement passive relocation of an active BUOW burrow by installing a one-way door and then permanently excluding the

BUOW from returning once it is confirmed that no BUOW individuals remain in the burrow. A biological monitor shall visit the site daily to verify that the burrow is empty by monitoring and scoping the burrow.

- **Construction BUOW Protection Measures.** A biological monitor shall be onsite to monitor any BUOW or signs of BUOW. If any BUOW are observed then the biologist shall consult with VVTA and CDFW to determine the appropriate measures.

MM-BIO 4: Biological Monitor, Project Limits, and Designated Areas

Biological Monitor

A biological monitor shall monitor activities that result in tree or vegetation removal to minimize the likelihood of inadvertent impacts on nesting birds and special-status wildlife species, with special attention given to any protected species observed during the pre-construction breeding bird surveys. Monitoring shall also be conducted periodically during construction activities to ensure no new nests are built during any vegetation removal or demolition activities between February 1 and September 15. The biological monitor shall ensure that all BMPs, avoidance, protection and mitigation measures described in the relevant project permits and reports are in place and are adhered to.

The biological monitor shall have the authority to temporarily halt all construction activities and all non-emergency actions if sensitive species and/or nesting birds are identified and would be directly affected. The monitor shall notify the appropriate resource agency and consult if needed. If necessary, the biological monitor shall relocate the individual outside of the work area where it will not be harmed. Work can continue at the location if the applicant and the consulted resource agency determine that the activity will not result in adverse effects on the species.

The appropriate agencies shall be notified if a dead or injured protected species is located within the project site. Written notification shall be made within 15 days of the date and time of the finding or incident (if known) and must include location of the carcass, a photograph, cause of death (if known), and other pertinent information.

Project Limits and Designated Areas

To avoid impacts on sensitive biological resources, the project proponent shall implement the following measures prior to project construction and commencement of any ground-disturbing activities or vegetation removal.

- Specifications for the project boundary, limits of construction, project-related parking, storage areas, laydown sites, and equipment storage areas shall be mapped and clearly marked in the field with temporary fencing, signs, stakes, flags, rope, cord, or other appropriate markers. Construction limits shall 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. All markers shall be maintained until the completion of activities in that area. 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.

- To minimize the amount of disturbance, the construction/laydown areas, parking areas, staging areas, storage areas, spoil areas, and equipment access areas shall be restricted to designated areas. To the extent possible, designated areas shall comprise existing disturbed areas (parking lots, access roads, graded areas, etc.).

- Project related work limits shall be defined and work crews shall be restricted to designated work areas. Disturbance beyond the actual construction zone is prohibited without site specific surveys. 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. If sensitive biological resources are detected in the area to be impacted, then appropriate measures shall be implemented to avoid impacts (i.e., flag and avoid, erect orange snow fencing, biological monitor present during work, etc.). However, if avoidance is not possible and the sensitive biological resources will be directly impacted by project activities, the biologist shall mark and/or stake the site(s) and map the individuals on an aerial map and with a GPS unit. The biologist shall then contact the appropriate resource agencies to develop additional avoidance, minimization and/or mitigation measures prior to commencing project activities.

- The project proponent shall ensure that construction activities will include measures to prevent accidental falls into excavated areas. The construction crew shall inspect excavated areas daily to detect the presence of trapped wildlife. All deep or steep-walled excavated areas shall be covered with tarp and either be furnished with escape ramps or be surrounded with exclusionary fencing to prevent wildlife from entering them. Wildlife found in excavation areas should be trapped and relocated out of harm's way to a suitable habitat outside of the project area, if possible.

MM-BIO 5: General Vegetation and Wildlife Avoidance Protection Measures

The BSA contains habitats which can support many wildlife species. The following general avoidance and protection measures to protect vegetation and wildlife shall be implemented to the extent practical:

- Cleared or trimmed vegetation and woody debris shall be disposed of in a legal manner at an approved disposal site. Cleared or trimmed non-native, invasive vegetation shall be disposed of in a legal manner at an approved disposal site as soon as possible to prevent regrowth and the spread of weeds.

- 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.

- Non-native species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.

- Vehicles and equipment shall be free of caked mud or debris prior to entering the project site to avoid the introduction of new invasive weedy plant species.

- To minimize construction-related mortalities of nocturnally active species such as mammals and snakes, it is recommended that all work be conducted during daylight hours. Nighttime

work (and use of artificial lighting) shall not be permitted unless specifically authorized. If required, night lighting shall be directed away from the preserved open space areas to protect species from direct night lighting. All unnecessary lights shall be turned off at night to avoid attracting wildlife such as insects, migratory birds, and bats.

- If any wildlife is encountered during the course of project activities, said wildlife shall be allowed to freely leave the area unharmed.

- Wildlife shall not be disturbed, captured, harassed, or handled. Animal nests, burrows and dens shall not be disturbed without prior survey and authorization from a qualified biologist.

- Active nests of special-status or otherwise protected bird species cannot be removed or disturbed. Nests can be removed or disturbed if determined inactive by a qualified biologist.

- To avoid impacts on wildlife and attracting predators of protected species, the project proponent shall comply with all litter and pollution laws and shall institute a litter control program throughout project construction. All contractors, subcontractors, and employees shall also obey these laws. These covered trash receptacles shall be placed at each designated work site and the contents shall be properly disposed at least once a week. Trash removal will reduce the attractiveness of the area to opportunistic predators such as common ravens, coyotes, northern raccoons, and Virginia opossums.

- Contractors, subcontractors, employees, and site visitors shall be prohibited from feeding wildlife and collecting plants and wildlife.

- Disturbance near ponded water shall be limited during the rainy season. It could serve as potential habitat for amphibians and sensitive invertebrates

MM BIO-6: Loggerhead Shrike Survey and Protection Measures

The following measures are proposed to minimize impacts to loggerhead shrike, for which there is suitable habitat in the BSA.

- If construction activities would commence during the breeding/nesting period, a wildlife survey shall be completed by a qualified biologist to identify potential loggerhead shrike activity in the area of the project activities.

- Additional species surveys to determine presence/absence of birds prior to disturbances, from May 1 until the work start date, if the work start date is prior to August 31. Surveys are to occur weekly in May, every other week in June, and once per month in July and August (assuming no loggerhead shrike are observed).

- Incidental occurrences of other sensitive avian species such as Swainson's hawk, prairie falcon, and Cooper's hawk should also be recorded during the survey.

MM BIO-7: §2081 FGC Incidental Take Permit

Western Joshua trees are a state candidate for listing under CESA and will require a § 2081 FGC Incidental Take Permit (ITP) with compensatory mitigation for impacts. The exceptions and permitting process under the California Desert Native Plants Act and the separate exceptions under

the Native Plant Protection Act will not apply to western Joshua tree in any manner. For projects where take is incidental to carrying out an otherwise lawful activity, an ITP may be obtained from CDFW.

The incidental take permit issued by CDFW will contain a description of the proposed project and avoidance and minimization measures to reduce the project's impact on western Joshua trees. The applicant must satisfy all the conditions in the incidental take permit prior to implementing the project. Fees are required to be paid to the CDFW.

MM BIO-8: Focused Botanical Surveys (Hesperia Transfer Hub Site)

Prior to construction activities: to avoid impacts to special-status plant species, a qualified biologist shall survey the BSA and project site for the presence of the special-status plant species with the potential to occur (White Pygmy Poppy, White-bracted Spineflower, Booth's Evening Primrose, Beaver Dam Breadroot). See the Appendix B species list in the biological report included in **Appendix C2** of this document. The focused plant surveys shall be conducted in accordance with standardized guidelines issued by the regulatory agencies and by CNPS. The surveys shall be conducted in the field at appropriate times of the year to coincide with the growing season and different blooming periods and when optimum conditions for identification (generally blooms, fruits, and leaves) are present. Biologists shall pay special attention to those habitat areas that appear to provide suitable habitat for special-status species.

Every plant taxon that occurs on site shall be identified to the taxonomic level necessary to determine rarity and listing status, as feasible. Plant species shall be identified using plant field and taxonomical guides. All special-status plant species shall be identified, recorded in field notes, counted or estimated, and mapped on an aerial map or with a GPS unit.

Following completion of the focused botanical surveys, the biologist shall prepare a focused botanical survey report in accordance with agency guidelines. The report shall: 1) summarize information regarding the habitat of the survey area and the habitat's suitability for special-status plants; 2) assess the potential presence of special-status plants onsite; 3) analyze the potential impacts on special-status plants from project development; and 4) recommend, as appropriate, BMPs, avoidance and protection measures, and mitigation measures to reduce or avoid potential impacts on special-status plants. The report shall include: 1) methods and results of the literature review and field surveys; 2) figures depicting the location of special-status plants; 3) a complete flora compendium; and 4) site photographs.

MM BIO-9: Protocol Trapping Surveys for the Mohave ground squirrel (Hesperia Transfer Hub Site)

Prior to construction commencement: protocol trapping surveys for the Mohave ground squirrel shall be conducted in accordance with the *Mohave Ground Squirrel Survey Guidelines* (CDFW, 2023) by a biologist with a Memorandum of Understanding (MOU) from the CDFW to determine the presence or absence of this species.

A project-specific report shall be prepared and submitted to the appropriate CDFW regional office contact to support the environmental review process for the project. A current CDFW Mohave ground squirrel survey form spreadsheet must be included with project-specific reports.

If Mohave ground squirrels are determined to be present in the BSA, consultation with the CDFW shall occur. Avoidance measures may include the restriction of construction activities for each phase of the project as necessary to avoid disturbance to the known burrows or establishment of exclusion zones (no ingress of personnel or equipment), installation of exclusionary fencing of the area where the species are found and posting of signs to publicize the sensitive nature of the area.

Level of Significance After Mitigation

With implementation of mitigation measures **BIO-1** through **BIO-9,** the proposed project would have less than significant impacts to special-status plant and wildlife species.

b) Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

No Impact

No riparian habitat and no sensitive natural vegetation communities occur within the Hydrogen Fueling Station site or the Hesperia Transfer Hub site. No USFWS-designated Critical Habitat for federally listed plant or wildlife species occur on either site.

Neither the Hydrogen Fueling Station site nor the Hesperia Transfer Hub site contain waters or wetlands that would fall under the jurisdiction of state and federal agencies such as the CDFW, the RWQCB, or the USACE (AECOM, 2021; HES, 2025b). Therefore, no impacts would occur with regards to riparian habitat or other sensitive natural communities, and mitigation is not required.

c) Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact

No NWI features are within the BSA and none were identified to occur on either site during field surveys. Neither the Hydrogen Fueling Station site or the Hesperia Transfer Hub site contain waters or wetlands that would fall under the jurisdiction of state and federal agencies such as the CDFW, the RWQCB, and the USACE (AECOM, 2021; HES, 2025b). Therefore, no impacts would occur with regards to state or federally protected wetlands and mitigation is not required.

d) Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less Than Significant Impact with Mitigation Incorporated

No designated wildlife corridors or linkages are located for either project site. Both sites do not contain mountain canyons or riparian corridors and no corridors occur in the vicinity of the project sites. Furthermore, both sites are surrounded by urban development, including an existing VVTA facility and a busy roadway and residential uses to the south. Although open, vacant lands exist to the north and east, urban development is present beyond in the form of industrial uses. No wildlife movement corridors were found to be present on or within the vicinity of either project site (AECOM,

2021; HES, 2025b). Construction and operation of the proposed project would not interfere with the movement of any native resident or migratory fish or wildlife species or with native resident or migratory wildlife corridors.

Some special-status bird species may fly over or briefly rest within the Hydrogen Fueling Station site as migrating or foraging transients; however, they are generally not expected to nest within this site. The Hesperia Transfer Hub site contains trees and shrubs that can be utilized by nesting birds and raptors during the nesting bird season of February 1 through September 15. Burrows potentially suitable for nesting by burrowing owl and ground squirrels were identified on both sites and suitable habitat for these species occurs on both sites. Implementation of **MMs BIO-1** through **BIO-6 and BIO-9** will reduce potential impacts to breeding (nursery) areas on the project sites to less than significant.

e) Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less Than Significant with Mitigation Incorporated

The following native desert plants are subject to the regulations implemented in Chapter 16.24 of the City of Hesperia Municipal Code, as per § 16.24.150:

1. *"The following desert native plants with stems two inches or greater in diameter or six feet or greater in height:*
   (a) Dalea, Spinosa (smoketree)
   (b) All species of the family Agavaceae (century plants, nolinas, yuccas)
   (c) All species of the genus Prosopis (mesquites).
2. *Creosote rings, ten feet or greater in diameter.*
3. *All Joshua trees (mature and immature)."*

The Hydrogen Fueling Station site contains two WJTs. Both were alive but one was documented as being in poor health (HES, 2025a). The Hesperia Transfer Hub site contains 30 WJTs and one WJT within a 50-foot buffer. Only 19 of the onsite trees and the one offsite tree were alive and the remaining 11 trees onsite were dead (RCA Associates, Inc., 2024). The WJT qualifies for protection under Article II, § 16.24.150, which also provides that "*all plants protected or regulated by the State Desert Native Plants Act (i.e., Food and Agricultural Code 80001 et seq.) shall be required to comply with the provisions of those statues prior to the issuance of any county development permit or land use application approval. The county agricultural commissioner is the responsible agency for the issuance of any required wood tags, seals or permits*" (City of Hesperia; 1997). A qualified City-approved biologist or arborist, with the concurrence of VVTA should be retained to conduct any future relocation/transplanting activities and should follow the protocol of the City's Municipal Code. As provided in § 16.24.120 of City Municipal Code, "*any person who willfully removes, or harvests or transplants a living desert native plant shall first obtain approval from the county to do so in accordance with the procedures set forth in Sections 16.24.040 or 16.24.110 et seq*." (City of Hesperia, 1997). The City of Hesperia considers all western Joshua trees as one of the protected vegetation types.

To mitigate for the impacts to the protected native desert vegetation on both project sites, VVTA will implement mitigation measure **BIO-10** which proposes that a native desert vegetation survey is conducted to aid in the creation of a Protected Plant Preservation Plan as required by the City. After implementation of **BIO-10,** which is further discussed below, impacts to protected native desert vegetation and Joshua trees would be reduced to a less than significant impact.

Mitigation Measures

MM BIO-10: Native Desert Vegetation Survey and Protected Plant Preservation Plan

The City of Hesperia's Municipal Code (Chapter 16.24) requires preservation of Joshua trees given their importance in the desert community.

A Protected Plant Preservation Plan (which is required by City Municipal Code) shall be prepared and submitted to the City for review and approval. A native desert vegetation survey must be conducted to produce findings that will guide the formation of this plan. The survey objective is to evaluate the health and general condition of the western Joshua trees and creosote bush present on the project site. A project-specific plan will provide further guidance regarding the transplant and/or preservation of the western Joshua trees and protection for creosote rings "10 feet or greater in diameter" as per § 16.24.150 of City Municipal Code. Transplant suitability of the western Joshua trees will be determined by the results of the survey.

This survey shall be conducted by a qualified biologist or arborist.. The plan shall incorporate survey data, identify and outline preconstruction survey methods for the native desert vegetation on the project site, describe preconstruction and construction-phase biological monitoring and transplant methods that are applicable, or outline any identified CDFW permit and Memorandum of Understanding requirements for active relocation, if either is necessary. The Plan shall include details of protective actions regarding the western Joshua trees on the project site.

A qualified City-approved biologist or arborist, with the concurrence of VVTA shall be retained to conduct any relocation/transplanting activities and should follow the protocol of the city's Municipal Code and Protected Native Vegetation Plan provided by the city's Planning Division. The Protected Plant Preservation Plan shall include details regarding criteria and requirements when conducting transplanting activities such as the following:

The Joshua trees shall be retained in place or replanted somewhere on the site where they can remain in perpetuity or shall be transplanted to an off-site area approved by the City where they can remain in perpetuity. Joshua trees identified as not suitable for transplanting shall be cut up and discarded according to City requirements.

One week prior to excavation, earthen berms shall be created around each tree by the biologist and the trees shall be watered during the week prior to transplanting. Watering the trees prior to excavation will help make excavation easier, ensure the root ball will hold together, and minimize stress to the tree.

Prior to moving, holes to accept the trees shall be excavated at the pre-selected location. Trees shall be placed and oriented in the same direction as their original direction. The holes shall be backfilled with native soil, and the transplanted tree shall be immediately watered. All trees must be tagged on their north-facing side prior to moving to ensure they will be placed in the same direction. The Protected Plant Preservation Plan shall include a watering schedule to ensure the survival of the transplanted trees. The watering program shall be based upon the needs of the trees and the local precipitation.

Level of Significance After Mitigation

Implementing measure **BIO-10** would reduce impacts resulting from the removal of protected native desert vegetation and western Joshua trees to less than significant.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact

The project will not conflict with provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. The project is not located in an area covered by conservation plans such as those listed above. The plant protections implemented by City's Municipal Code are discussed in the previous **Section e).** Therefore, there would be no impacts.

4.5 Cultural Resources

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?				**X**
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		**X**		
c) Disturb any human remains, including those interred outside of formal cemeteries?		**X**		

Information from UltraSystems' Cultural Resources Inventory Report, dated April 2025 (see **Appendix D1**), prepared for the Victor Valley Transit Authority (VVTA), Hydrogen Fueling Station and Transfer Hub projects, City of Hesperia has been included within this section.

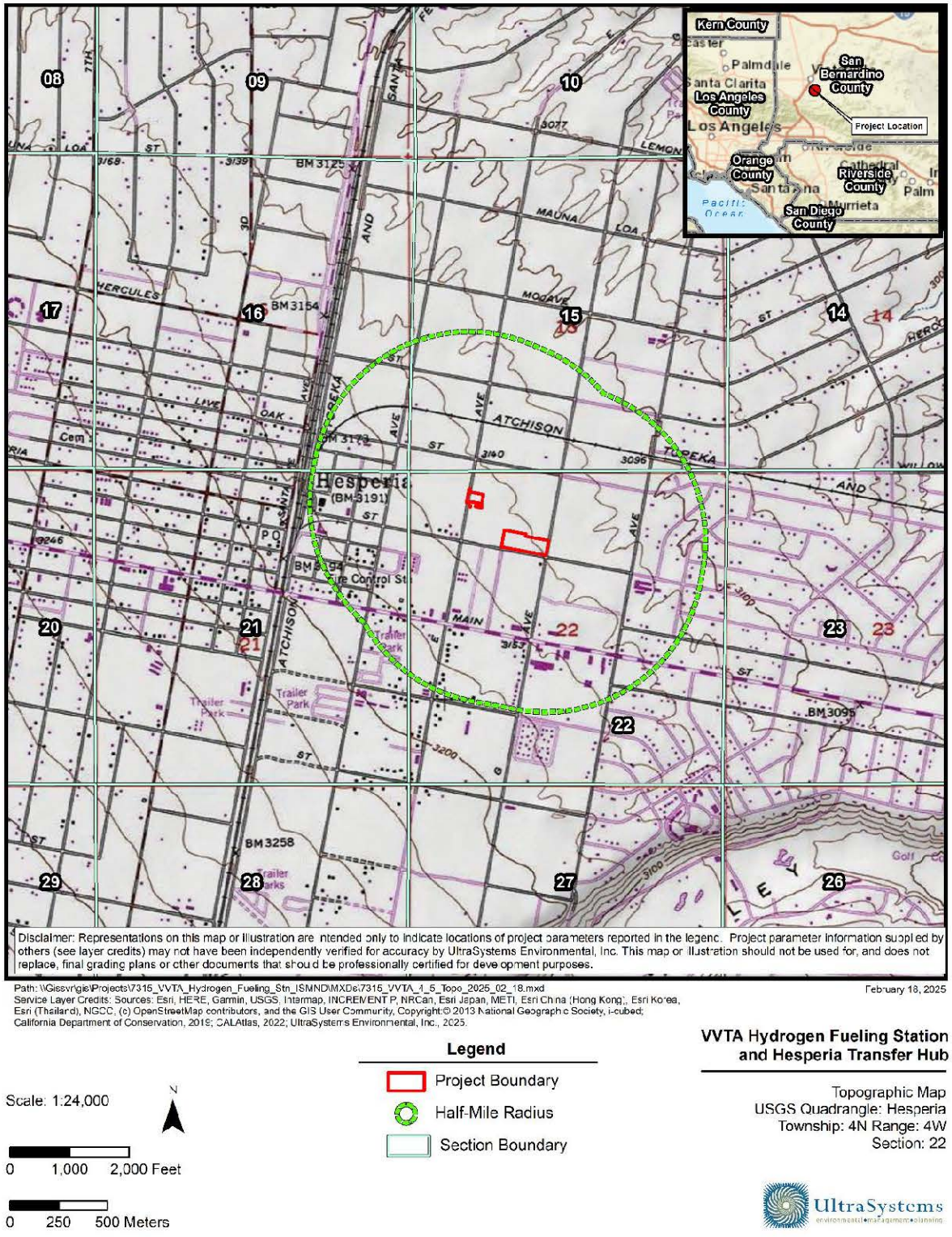
4.5.1 Methodology

A cultural resources inventory was requested January 24, 2025 for the Hydrogen Fueling Station and Transfer Hub project sites (**Figure 4.5-1,** *Topographic Map*) that would include a California Historic Resources Inventory System (CHRIS) records and literature search at the South Central Coastal Information Center (SCCIC) located at California State University Fullerton. Additionally, a request was made to the Native American Heritage Commission (NAHC) to conduct a search of its Sacred Lands File (SLF) for potential traditional cultural properties as well as to provide a list of local Native American tribes and tribal representatives to contact. Finally, a pedestrian survey of the project site was completed. The SCCIC records search was conducted on February 6, 2025. The NAHC request was made on February 4, 2025, and a reply was received on February 5, 2025; letters were sent to the listed tribes on February 6, 2025, and follow-up telephone calls were conducted March 18, 2025. The pedestrian field survey was conducted on March 19, 2025.

4.5.2 Existing Conditions

Based on the cultural resources records search, it was determined that no prehistoric or historic cultural resources have been previously recorded within the project site boundary and within the 0.5-mile buffer zone. The pedestrian field survey undertaken for this project noted the presence of a historic era refuse deposit (see **Section 4.3** in **Appendix D1**) but was negative for prehistoric resources.

Figure 4.5-1
TOPOGRAPHIC MAP



4.5.3 Impact Analysis

a) Would the project cause a substantial adverse change in the significance of a historical resource pursuant to in § 15064.5?

No Impact

A historical resource is defined in § 15064.5(a)(3) of the *CEQA Guidelines* as any object, building, structure, site, area, place, record, or manuscript determined to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Historical resources are further defined as being associated with significant events, important persons, or distinctive characteristics of a type, period or method of construction; representing the work of an important creative individual; or possessing high artistic values. Resources listed in or determined eligible for the California Register, included in a local register, or identified as significant in a historic resource survey are also considered as historical resources under CEQA.

Similarly, the National Register criteria (contained in Code of Federal Regulations Title 36 § 60.4) are used to evaluate resources when complying with Section 106 of the National Historic Preservation Act. Specifically, the National Register criteria state that eligible resources comprise districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that (a) are associated with events that have made a significant contribution to the broad patterns of our history; or (b) that are associated with the lives of persons significant in our past; or (c) that embody the distinctive characteristics of a type, period, or method of construction, or that possess high artistic values, or that represent a significant distinguishable entity whose components may lack individual distinction; or (d) that have yielded or may be likely to yield, information important to history or prehistory.

A substantial adverse change in the significance of a historical resource, as a result of a project or development, is considered a significant impact on the environment. Substantial adverse change is defined as physical demolition, relocation, or alteration of a resource or its immediate surroundings such that the significance of the historical resource would be materially impaired. Direct impacts are those that cause substantial adverse physical change to a historic property. Indirect impacts are those that cause substantial adverse change to the immediate surroundings of a historic property, such that the significance of a historical resource would be materially impaired.

There are no known historic cultural resources within the project site boundary or immediately adjacent, based on findings of the CHRIS records search, research conducted on the project site's history and the pedestrian survey. Therefore, it is determined there is a low potential for the presence of historic resources. While there is always the potential for unanticipated historic resource discoveries being made during ground disturbing activities, it is anticipated there would be no impacts on historic resources associated with the development of the project.

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

Less than Significant Impact with Mitigation Incorporated

An archaeological resource is defined in § 15064.5(c) of the CEQA Guidelines as a site, area or place determined to be historically significant as defined in § 15064(a) of the CEQA Guidelines, or as a

unique archaeological resource defined in § 21083.2 of the Public Resources Code as an artifact, object, or site that contains information needed to answer important scientific research questions of public interest or that has a special and particular quality such as being the oldest or best example of its type, or that is directly associated with a scientifically-recognized important prehistoric or historic event or person.

The cultural resources records search conducted at the SCCIC determined that there are no known prehistoric or historic cultural resource sites, features or isolates recorded within the project boundary or in the 0.5-mile zone.

A Cultural Resources Technical Memorandum that was prepared by AECOM for the Hydrogen Fueling Facility Project Categorical Exclusion Project in 2021 (Beherec and Hill 2021a) was provided by VVTA. The pedestrian survey conducted during this project recorded a single historic trash scatter. ANH091521-1 was recorded as a light and small household deposit measuring 85 feet north/south by 66 feet east/west. This site surrounds a central 30 feet in diameter partially burnt concentration. The authors indicate that this evidence suggests a single dumping episode. Artifacts recorded at the site include crushed cans (including very fragmented hole-in-cap cans), miscellaneous unidentified metal scrap, glass (including solar-colored amethyst, aqua, and clear glass), ceramic tableware, and unidentified ceramic fragments.

There have been 11 previous cultural resource studies within the 0.5-mile buffer of the project (**Table 4.1-2**). None of these surveys intersect the current project boundary. The cultural resource surveys and investigations that took place in this area consist of two projects on roadways (SB-0365, SB 0679), a planned post office construction project (SB-1674), two commercial developments (SB-2271 and SB-4789) and an industrial park renovation (SB-2667), three wireless telecommunications projects (SB-3936, SB-7848, and SB-4789), one residential development (SB-4970), and the planned placement of a railroad lead track (SB-6120). All are situated more than one block distance from the current project site. No cultural resources were found or recorded by these projects.

A pedestrian field survey of the project site was conducted on March 19, 2021. The survey consisted of walking over, visually inspecting, and photographing the exposed ground surface of the project site in parallel east/west transects spaced 10 meters apart across the project site. In this way the ground surface in the project area was carefully examined for any evidence of human activities dating to the prehistoric or historic periods (i.e., 50 years or older).

A field survey of the 2.7-acre northern Hydrogen Fueling Station project site and the 3.06-acre southern Hesperia Transfer Hub project site was conducted. The project sites appear to be in their natural state and have not been previously disturbed. Terrain is relatively flat high desert young and very old alluvial fan deposits. Loamy sand with sporadic subangular cobbles. Ground visibility was good (85 percent).

During the survey, the ground surface within and adjacent to the project area was inspected for any evidence of human activities dating to the prehistoric or historic periods. A historical refuse scatter was recorded on the eastern boundary of the Hydrogen Fueling Station parcel. This is the same site that was recorded by Beherec and Hill in 2021 (2021a) and given the temporary site designation of ANH091521-1. The refuse scatter consists of several Hole-In-Top cans and fragments, aqua glass, amethyst glass, ceramic vessels and fragments, clear liquor bottle bases, and various associated unidentifiable fragments. The site also contains extensive modern debris and evidence of 1 small brushfire. See Continuation Sheet for ANH091521-1 in **CONFIDENTIAL Attachment E** in **Appendix D1**.

No further historic features or artifacts were observed, and no prehistoric features or artifacts were observed in the project area.

A NAHC SLF search was conducted on and within a 0.5-mile buffer around the project site. The NAHC letter of February 6, 2025 indicated that there is the presence of traditional cultural property within this area. Thirteen representatives of seven Native American tribes were contacted requesting a reply if they have knowledge of cultural resources in the area that they wished to share and asking if they had any questions or concerns regarding the project. These tribes included:

- Chemehuevi Indian Tribe
- Morongo Band of Mission Indians
- Quechan Indian Tribe of the Fort Yuma Reservation
- San Fernando Band of Mission Indians
- San Manuel Band of Mission Indians
- Serrano Nation of Mission Indians
- Twenty-Nine Palms Band of Mission Indians

On February 6, 2025, Raylene Borrego, Cultural Resources Technician for the San Manuel Band of Mission Indians indicated through email that the NAHC alerted them of our proposed project and asked for a map of the proposed project's location to determine if the project is within a culturally sensitive area. Our outreach letter and map was sent the same day. On February 21, 2025, Eunice Ambriz, Cultural Resources Technician indicated that the proposed project is considered moderately culturally sensitive by the Tribe due to the area being undeveloped and resources recorded nearby. There is also an ephemeral waterway 0.5 mile away. She also indicated that the tribe would like to engage in government-to-government consultation pursuant to AB 52 with the Lead Agency for the project.

On February 6, 2025, Jill McCormick, Historic Preservation Officer, on behalf of Jordan Joaquin, President for the Quechan Tribe of the Fort Yuma Reservation indicated through email that the tribe does not wish to comment on this project and defer to more local tribes.

Following up on the initial letter and email contacts, telephone calls were conducted on March 18, 2025, to complete the outreach process. These calls were to the nine tribal contacts who had not already responded to UEI mailing and email. Five telephone calls were placed with no answer and so messages were left describing the project and requesting a response. These were to Ann Brierty, THPO of the Morongo Band of Mission Indians, Robert Martin, Chairperson of the Morongo Band of Mission Indians, Donna Yocum, Chairperson of the San Fernando Band of Mission Indians, Wayne Walker, Co-Chairperson of the Serrano Nation of Mission Indians, Christopher Nicosia, Cultural Resources Manager/THPO Manager of the Twenty-Nine Palms Band of Mission Indians. In a call to Kaitlyn Snodgrass, Cultural Director and Chairman Glenn Lodge of the Chemehuevi Indian Tribe, the tribal receptionist indicated that Ms. Snodgrass and Chairman Lodge were not available, and a message was left for Ms. Snodgrass. In a call to Mark Cochrane, Co-Chairperson of the Serrano Nation of Mission Indians the phone number was disconnected. There has been no response to date.

Nicolas Garza, Cultural Resources Specialist for the Twenty-Nine Palms Band of Mission Indians indicated that they have seen our letter and are in the process of responding to it. Mr. Garza asked that we call him back on Thursday, March 20, 2025. Since a response was received from Mr. Garza, Sarah O'Brien, Tribal Archivist, was not contacted by phone. Mr. Garza called back on March 20, 2025 and indicated that he was still waiting on the letter response to be signed. A call was received from

Mr. Garza on April 1, 2025 indicating that the letter is signed and would be sent by email that day. On April 2, 2024, another phone call was received from Mr. Garza indicating that Mr. O'Neil's email bounced back and asked for another email. Mrs. Doukakis' email was provided, and the letter response was received through email on April 9, 2025. The letter response was dated March 27, 2025 and indicated that the project is within the Chemehuevi Traditional Use Area but no known cultural resources are located within the project Area of Potential Effect (APE). Unknown buried archeological materials could be present on the site. The letter also indicates that the tribe would like to be included in AB 52 consultation. (see contact record table in **Attachment C**, **Appendix D1**).

The single historic era refuse deposit, ANH091521-1, previously recorded in the project boundary and relocated during the pedestrian survey for this project does not appear to be eligible for inclusion in either the California Register of Historical Resources (CRHR) or the National Register of Historic Places (NRHP). This single-episode historic dumping event is not associated with events that played a significant role in the broad patterns of national, state, or local history (Criterion A/1). Research has not identified a person responsible for the trash scatter whose life was important to national, state, or local history (Criterion B/2). The refuse is not representational of a construction method, has no artistic value, and is not the work of a master (Criterion C/3). Finally, this small surface scatter of artifacts dumped on undeveloped property in about the first half of the twentieth century has little data potential. The characteristics of the resource, including all maker's marks and other chronological indicators, have been thoroughly documented in these forms, exhausting the resource's data potential. The resource has not yielded significant data important to national, state, or local history or prehistory, nor is it likely to (Criterion D/4). Therefore, this resource does not meet any of the criteria for inclusion in the NRHP or CRHR.

The project APE has a medium sensitivity for cultural resources. While the APE may have been utilized by Native Americans, it is unlikely they settled in the APE for long periods of time; therefore, it is unlikely a significant archaeological site developed in this location. No historic buildings or structures are known to have ever existed within the APE, which is in an undeveloped area of desert that was difficult to use or access until the latter half of the twentieth century. Refuse was dumped on the APE at one time, but there is no evidence the APE was intensively used either in the prehistoric or the historic period.

Beyond the single known historic-period resource it is not anticipated that the project will impact any further prehistoric or historic era cultural resources and due to this it is not recommended that an archaeological monitor be present during ground-disturbing activities throughout the project site (except as noted below).

However, the possibility exists for the project to encounter unanticipated archaeological resources in the course of project construction excavation. If cultural resources are exposed during subsurface construction excavation, all work will be halted in the vicinity of the archaeological discovery until a Secretary of the Interior qualified archaeologist and Native American monitor should be brought in to visit the site of discovery, assess the significance of the archaeological resource and prepare a treatment plan approved by the VVTA.

In the unlikely event of an unexpected discovery, implementation of mitigation measure **CUL-1** would ensure that impacts related to discovery of archaeological resources would be less than significant.

Mitigation Measure

MM CUL-1 If archaeological resources are discovered during construction activities, the contractor will halt construction activities in the immediate area and notify VVTA. The project applicant shall retain an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for Archaeology who will be notified and afforded the necessary time to recover, analyze, and curate the find(s). The qualified archaeologist will recommend the extent of archaeological monitoring necessary to ensure the protection of any other resources that may be in the area. A local Native American monitor will also be contacted and retained to conduct monitoring on the remainder of the ground disturbing work. Any identified cultural resources shall be recorded on the appropriate DPR 523 (A-L) form and filed with the South Central Coastal Information Center. Construction activities may continue on other parts of the project site while evaluation and treatment of prehistoric archaeological resources takes place.

Level of Significance After Mitigation

With implementation of Mitigation Measures **MM CUL-1** above, the project would result in less than significant impacts to archeological resources.

c) Would the project disturb any human remains, including those interred outside of formal cemeteries?

Less than Significant Impact with Mitigation Incorporated

As previously discussed in **Section 4.5.b)** above**,** the project would be built on relatively undisturbed land that has not been previously graded and is in a suburban area. No human remains have been previously identified or recorded onsite.

The proposed project includes grading activities for the installation of the Hydrogen Fueling Station and Bus Transfer Hub and street improvements to the north half width of Smoke Tree Street for the length of the project site, including widening to 26 feet and installing curbs, gutters, and sidewalks. Lighting will also be installed along the perimeter of the Hub as well as landscaping throughout. Grading would involve new subsurface disturbance and could result in the unanticipated discovery of unknown human remains, including those interred outside of formal cemeteries. In the unlikely event of an unexpected discovery, implementation of mitigation measure **CUL-2** would ensure that impacts related to the accidental discovery of human remains would be less than significant.

California Health and Safety Code § 7050.5 specifies the procedures to follow during the unlikely discovery of human remains. CEQA § 15064.5 describes determining the significance of impacts on archeological and historical resources. California Public Resources Code § 5097.98 stipulates the notification process during the discovery of Native American human remains, descendants, disposition of human remains, and associated grave goods.

Mitigation Measure

MM CUL-2 If human remains are encountered during excavations associated with this project, all work will stop within a 30-foot radius of the discovery and the San Bernardino County Coroner will be notified (§ 5097.98 of the Public Resources Code). The Coroner will determine whether the remains are recent human origin or older Native American ancestry. If the coroner, with the aid of the supervising archaeologist,

determines that the remains are prehistoric, they will contact the NAHC. The NAHC will be responsible for designating the Most Likely Descendant (MLD). The MLD (either an individual or sometimes a committee) will be responsible for the ultimate disposition of the remains, as required by § 7050.5 of the California Health and Safety Code. The MLD will make recommendations within 24 hours of their notification by the NAHC. These recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials (§ 7050.5 of the Health and Safety Code).

Level of Significance After Mitigation

With adherence to applicable codes and regulations protecting cultural resources and with implementation of Mitigation Measure **MM CUL-2** above, the proposed project would result in less than significant impacts to human remains.

4.6 Energy

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

a) Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less than Significant Impact

According to CEQA Guidelines § 15126.2(d), "uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement that provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified." Therefore, the purpose of this analysis is to identify any significant irreversible environmental effects of project implementation that cannot be avoided.

Both construction and operation of the project would lead to the consumption of limited, slowly renewable, and non-renewable resources, committing such resources to uses that future generations would be unable to reverse. The new development would require the commitment of resources that include (1) building materials, (2) fuel and operational materials/resources, and (3) the transportation of goods and people to and from the project.

Electricity

Construction Use

Southern California Edison (SCE) provides electricity to businesses and residents in the city of Hesperia. Temporary electric power for as-necessary lighting and electronic equipment during construction of the project would therefore be provided by SCE. Lighting would be used in compliance with applicable City of Hesperia Municipal Code requirements to provide enough light for safety.

Operational Use

Project operation would require electricity for multiple purposes including, but not limited to, building heating and cooling, lighting, appliances, and electronics. Additionally, the supply, conveyance, treatment, and distribution of water used by the project would require electricity. As part of the air quality and greenhouse gas emissions analyses (refer to **Sections 4.3** and **4.8**), the California Emissions Estimator Model (CalEEMod) was used to estimate the electricity demand for the proposed project.

Natural Gas

Construction Use

Southwest Gas Corporation will provide natural gas for the proposed project. Construction activities, including the construction of new buildings and facilities, typically do not involve the consumption of natural gas. Any minor amounts of natural gas that may be consumed as a result of project construction would be temporary and negligible.

Operational Use

Natural gas consumption during operation would be minimal and would only be utilized by backup generators in the fueling station. Natural gas was therefore excluded from the analysis.

Petroleum

Construction Use

Petroleum-based fuel consumed by construction equipment would be the primary energy resource expended during construction. Transportation of construction materials and construction workers would also result in petroleum consumption. Heavy-duty construction equipment, vendor trucks, and haul trucks would use diesel fuel. Construction workers would likely travel to and from the project area in gasoline-powered vehicles. California's daily total use of petroleum is approximately 1.4 million barrels (CEC, 2024); petroleum use during construction would be negligible.

During project construction, trucks and construction equipment would be required to comply with the California Air Resources Board's (ARB's) anti-idling regulations. ARB's In-Use Off-Road Diesel Fueled Fleets regulation would also apply (ARB, 2023).

Operational Use

During operations, the majority of fuel consumption resulting from the project would involve the use of motor vehicles traveling to and from the project site. Annual project operation petroleum usage from on-road motor vehicle fuel consumption was estimated using the California Air Resources Board's Emission Factor model (EMFAC2025). CalEEMod was used to estimate the project's vehicle miles travelled (VMT), which was included in the EMFAC analysis to predict annual diesel and gasoline fuel consumption.

Impact Analysis

Less than Significant Impact

Construction Phase

The amount of electricity used during construction would be temporary and minimal, as demand would primarily stem from use of electrically powered hand tools. Therefore, project construction would not result in wasteful, inefficient, or unnecessary consumption of electricity, and impacts would be less than significant.

Construction activities, including the construction of new buildings and facilities, typically do not involve the consumption of natural gas. Any minor amounts of natural gas that may be consumed as a result of project construction would be temporary and negligible and would not have an adverse effect; therefore, construction would not result in wasteful, inefficient, or unnecessary consumption of natural gas. Therefore, impacts would be less than significant.

Construction for the Hydrogen Fueling Station is expected to take seven months, from November 2025 to May 2026, and construction for the Transfer Hub is expected to take 11 months, from October 2025 to August 2026. Because of the short-term nature of construction and relatively small scale of the projects, petroleum consumption during construction would be negligible when compared to California's daily total use of approximately 1.8 million barrels of petroleum. Vehicles driven to or from the project site (delivery trucks, construction employee vehicles, etc.) are subject to fuel efficiency standards established by the federal government, the ARB's anti-idling regulations and the ARB's In-Use Off-Road Diesel Fueled Fleets regulation. Therefore, project construction activities regarding fuel use would not result in wasteful, inefficient, or unnecessary consumption, and impacts would be less than significant.

Operational Phase

As part of the air quality and greenhouse gas emissions analyses (refer to **Section 4.3**), project operational energy use was estimated using CalEEMod, Version 2022.1.1.29 (CAPCOA, 2022). These estimates are summarized in **Table 4.6-1**. CalEEMod provides default assumptions regarding operational energy use based on standard fuel types—primarily gasoline, diesel, and natural gas—reflecting regional fleet characteristics derived from EMFAC data. However, CalEEMod does not currently account for hydrogen fuel cell technology in mobile sources.

As noted in the Victor Valley Transit Authority Comprehensive Operations Analysis (COA) Final Report – June 2024 (VVTA, 2024), the project involves a planned transition to zero-emission buses (ZEBs) using hydrogen fuel cell technology. This transition includes the development of hydrogen fueling infrastructure in Barstow and Hesperia and represents a substantial shift from fossil-fuel-based transit operations to a zero-emission alternative. Because CalEEMod does not reflect this fuel substitution, the model's operational emissions outputs likely overestimate actual future energy consumption and greenhouse gas emissions from transit operations under the proposed project.

Therefore, the CalEEMod-based operational energy estimates represent a worst-case scenario, as the model assumes continued use of conventional fuels and does not account for the project's planned transition to hydrogen fuel cell technology. Actual energy use and emissions are expected to be lower, supporting consistency with state and regional clean energy goals. In sum, the CalEEMod results are

considered to reflect a worst-case scenario for operational energy use and emissions. These estimates are summarized in **Table 4.6-1**.

Table 4.6-1
ESTIMATED PROJECT OPERATIONAL ENERGY USE

Energy Type	Units	Value	
		Hydrogen Fueling Station	Transfer Hub
Onroad Motor Vehicle Travel (Fuel)[a]	Gallons gasoline/year	0	3,442
	Gallons diesel/year	0	422
Electricity Use	Kilowatt-hours per year	4,044	31,012

[a] Onroad motor vehicle fuel consumption calculated by UltraSystems using EMFAC2021(v1.0.2) emissions inventory web platform tool (ARB, 2022) and CalEEMod (Version 2022.1.1.29) (CAPCOA, 2022); see **Appendix B1** and **Appendix B2**.
Electricity and natural gas use calculated by UltraSystems with CalEEMod (Version 2022.1.1.29) (CAPCOA, 2022).

As shown in **Table 4.6-1**, the project would consume approximately 3,864 gallons of petroleum-based fuel per year during operation. By comparison, approximately 27 billion gallons of petroleum were consumed in California in 2023 (EIA, 2024). The anticipated increase in consumption associated during one year of project operation is 0.00001 percent of statewide use, which is negligible. Although implementation of the project would result in an increase in petroleum use during operation, over time, vehicles would use less petroleum due to advances in fuel economy. Therefore, petroleum consumption due to the project's operations would not be wasteful, inefficient, or unnecessary, and impacts would be less than significant.

The project would consume approximately 4,044 kilowatt-hours (kWh) of electricity per year. The project is not expected to consume natural gas at the transfer hub and will only utilize natural gas in an emergency backup generator at the Hydrogen Fueling Facility. The emergency generator will only be used for maintenance and testing and occasional emergencies. Therefore natural gas consumption by the generator will be negligible. By comparison, in 2023, the latest year for which data are available, the San Bernardino County non-residential sector consumed approximately 9,994 gigawatt-hours (GWh) of electricity. The increase in electricity at the project site would be negligible relative to the countywide electricity. Therefore, electricity and natural gas consumption due to the project's operations would not be wasteful, inefficient, or unnecessary, and impacts would be less than significant.

Continued use of energy resources is consistent with the anticipated growth within the city and the general vicinity and would not result in energy consumption that would require a significant increase in energy production for the energy provider. Based on the information provided above, the proposed project would have a less than significant impact regarding wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.

b) Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less than Significant Impact

Title 24 Building Energy Efficiency Standards

The initial Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24, Part 6, of the California Code of Regulations) were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. Compliance with Title 24 will result in a decrease in GHG emissions.

The Title 24 standards are updated on a three-year schedule, with the most current 2022 standards adopted on August 11, 2021 and effective January 1, 2023. In December 2021, the 2022 standards were approved by the California Building Standards Commission for inclusion into the California Building Standards Code. The Building Energy Efficiency Standards (Energy Code) apply to newly constructed buildings, additions, and alterations. They are a vital pillar of California's climate action plan. The 2022 Energy Code will produce benefits to support the state's public health, climate, and clean energy goals by encouraging implementation of efficient electric heat pumps, establishing electric-ready requirements for new homes, expanding solar photovoltaic and battery storage standards, strengthening ventilation standards, and more. Buildings with permit applications applied for on or after January 1, 2023, must comply with the 2022 Energy Code. Public Resources Code §§ 25402 subdivisions (a)-(b) and § 25402.1 emphasize the importance of building design and construction flexibility by requiring the California Energy Commission (CEC) to establish performance standards, in the form of an "energy budget" in terms of the energy consumption per square foot of floor space (CEC, 2022).

Title 24 California Green Building Standards Code

The California Green Building Standards Code (Title 24, Part 11 code), commonly referred to as the CALGreen Code, is a statewide mandatory construction code developed and adopted by the California Building Standards Commission and the Department of Housing and Community Development. The CALGreen standards require new residential and commercial buildings to comply with mandatory measures under the topics of planning and design, energy efficiency, water efficiency/conservation, material conservation and resource efficiency, and environmental quality. CALGreen also provides voluntary tiers and measures that local governments may adopt that encourage or require additional measures in the five green building topics.

The provisions of Title 24, Part 6 apply to all buildings for which an application for a building permit or renewal of an existing permit is required by law. They regulate design and construction of the building envelope, space-conditioning and water-heating systems, indoor and outdoor lighting systems of buildings, and signs located either indoors or outdoors. Title 24, Part 6 specifies mandatory, prescriptive and performance measures, all designed to optimize energy use in buildings and decrease overall consumption of energy to construct and operate residential and nonresidential buildings. Mandatory measures establish requirements for manufacturing, construction, and installation of certain systems, equipment, and building components that are installed in buildings.

City of Hesperia General Plan and Climate Action Plan

The City of Hesperia adopted its Climate Action Plan (CAP) on July 20, 2010. It serves as a framework for implementing greenhouse gas reduction and sustainability strategies. Its goal for energy efficiency, Strategy CAP-9, is to "increase the use of energy conservation features and renewable sources of energy" (City of Hesperia, 2010, p.46). Policies in Hesperia's General Plan that support this goal and are relevant to the proposed projects include:

- Incorporating green building standards, such as Leadership in Energy and Environmental Design (LEED) programs, and building practices that exceed Title 24 requirements in private and public projects.

- Encourage sustainable development that involves conservation of natural resources utilization of alternative energy resources such as wind and solar in new development.

- Promote energy conservation through site layout, building design, natural light and efficient mechanical and electrical products in development.

- Coordinate with the local energy provider in developing policies and procedures to reduce energy consumption in existing and future developments.

The proposed project would adhere to applicable federal, state, and local requirements for energy efficiency, including Title 24 standards the City of Hesperia Climate Action Plan. Therefore, impacts would be less than significant.

4.7 Geology and Soils

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				**X**
ii) Strong seismic ground shaking?			**X**	
iii) Seismic-related ground failure, including liquefaction?			**X**	
iv) Landslides?				**X**
b) Result in substantial soil erosion or the loss of topsoil?			**X**	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			**X**	
d) Be located on expansive soil, as defined in Table 18-1 B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?			**X**	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				**X**
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		**X**		

The information in this section is based on the following three technical reports:

- Proposed Hydrogen Station - Hesperia Geotechnical Engineering Report. Prepared by Terracon. dated April 25, 2024. A complete copy of this report is included as **Appendix E1** to this IS/MND.

- Geotechnical Exploration, Victor Valley Transit Authority, Hesperia Transfer Hub. Prepared by Verdantas Inc., dated January 31, 2025. Prepared for Psomas. A complete copy of this report is included as **Appendix E2** to this IS/MND.

- Paleontological Records Search for the proposed Hydrogen Fueling Station and Transfer Hub Project. Prepared by Natural History Museum of Los Angeles County, dated February 9, 2025. A complete copy of this report is included as **Appendix E3** to this IS/MND.

a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

No Impact

The Alquist-Priolo Zones Special Studies Act defines active faults as those that have experienced surface displacement or movement during the last 11,000 years. As shown in **Figure 4.7-1**, the project site is not in an Alquist-Priolo Earthquake Fault Zone, and the nearest such zone to the project site is along the North Frontal fault zone approximately 4.8 miles to the east. The nearest active fault to the project site is also the North Frontal fault zone (Verdantas, 2025, p. 8).

Hydrogen Fueling Station (HFS) and Transfer Hub (HTH)

Development of the two projects would not exacerbate hazards related to surface rupture of a known active fault, and no impact would occur.

ii) Strong seismic ground shaking?

Less than Significant Impact

Several active faults are known in the project region, including the North Frontal fault zone, the San Andreas fault zone, the San Jacinto fault zone, and the Helendale Lockhart fault zone (Verdantas, 2025, p. 8). Several active faults in the project region are mapped on **Figure 4.7-2**. All structures in the region are susceptible to collapse, buckling of walls, and damage to foundations from strong ground shaking. The strength of earthquakes is measured in terms of *moment*, that is, the distance a fault moved multiplied by the force required to move it. Moment is described using the moment magnitude scale (M_W), where each one-point increase represents a 10-fold increase in moment (USGS, 2021). The western portion of the North Frontal Fault Zone can produce a maximum moment magnitude earthquake of Mw=7.2 (Verdantas, 2025, p. 8).

Figure 4.7-1
ALQUIST PRIOLO FAULT ZONES

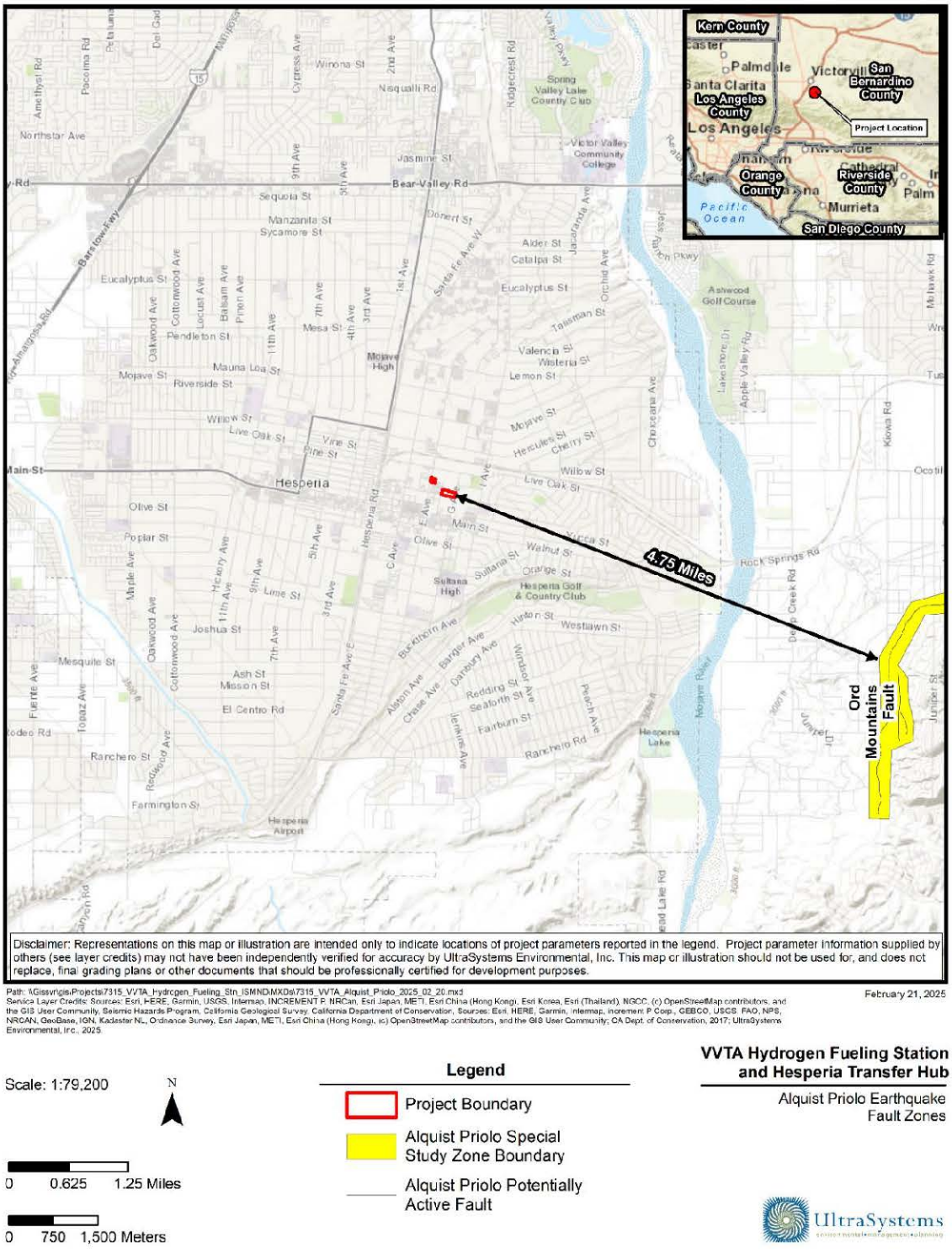
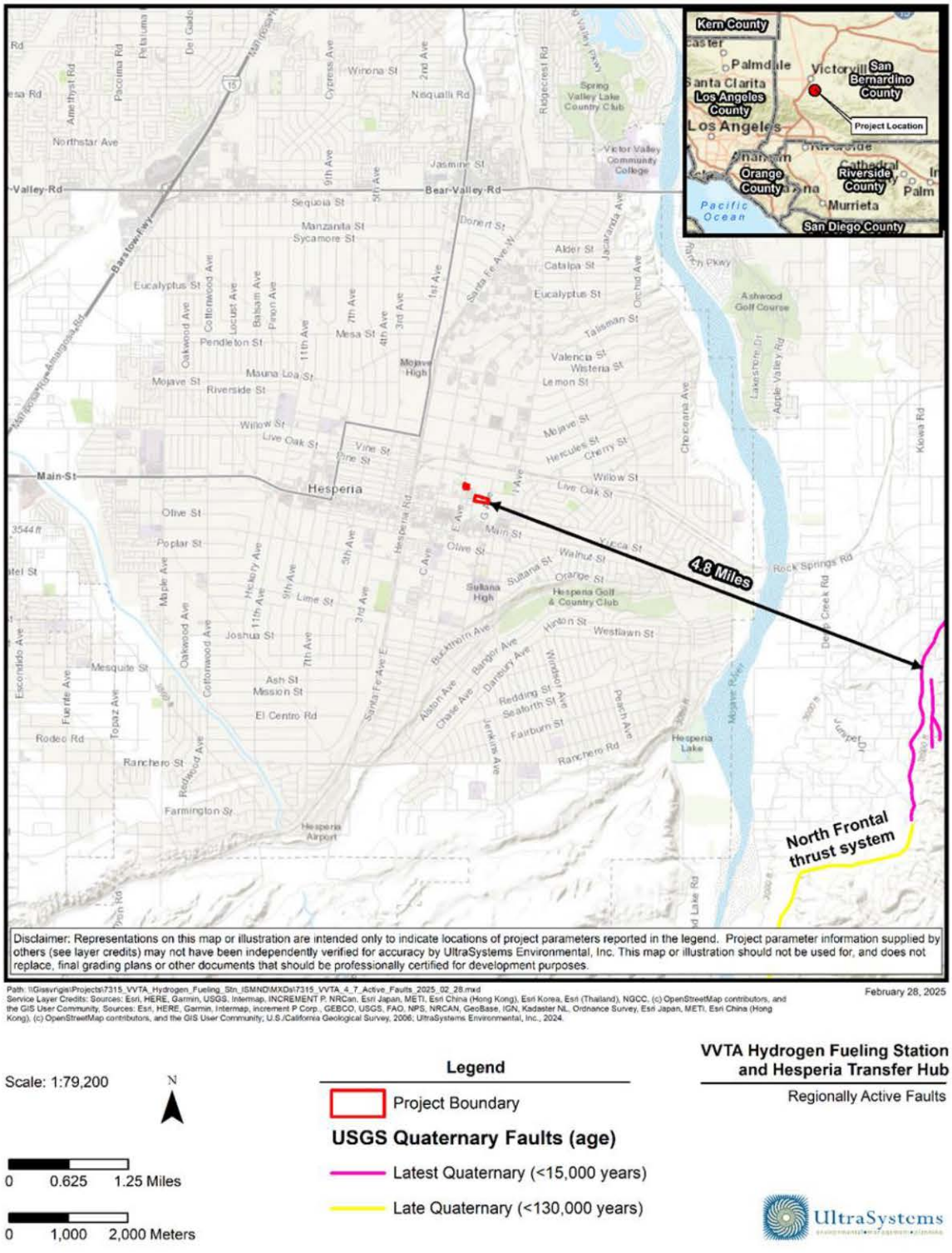


Figure 4.7-2
REGIONALLY ACTIVE FAULTS



Hydrogen Fueling Station and Transfer Hub

The geotechnical reports for each project set forth seismic design parameters, estimated pursuant to California Building Code (CBC) requirements, for use in the design and construction of the respective projects. The CBC provides minimum standards to protect property and for public welfare by regulating the design and construction of excavations, foundations, building frames, retaining walls, and other building elements to mitigate the effects of seismic shaking and adverse soil conditions. The CBC contains provisions for earthquake safety based on factors including occupancy type, the types of soil and rock onsite, and the strength of ground motion with specified probability of occurring at the site. Impacts would be less than significant after adherence to CBC requirements and implementation of recommendations in the geotechnical reports for each project.

iii) Seismic-related ground failure, including liquefaction?

Less than Significant Impact

Liquefaction refers to loose, saturated sand or silt deposits that behave as a liquid and lose their load-supporting capability when strongly shaken. Loose granular soils and silts that are saturated by relatively shallow groundwater are susceptible to liquefaction.

Hydrogen Fueling Station

The site is underlain by silty sand or clayey sand above well-graded sand; the depth between the two layers varies (Terracon, 2024, p. 4). Liquefaction hazard potential at the site is considered low based on the anticipated depth to groundwater and encountered subsurface conditions (Terracon, 2024, p. 7). Impacts would be less than significant.

Transfer Hub

The site is underlain by young alluvial fan deposits (Qyf) within the western region of the site and very old alluvial fan deposits (Qvof) within the eastern region of the site. Alluvial soils encountered within the exploratory borings drilled onsite generally consisted of sands to silty sands down to 35 feet below ground surface (bgs). From 35 feet to the maximum drilled depth of 51.5 feet bgs, alluvial soils consisted of silts and silts with sand with an interbed layer of silty sand at 45 feet (Verdantas, 2025, p. 6).

Liquefaction is not considered a significant hazard at the Transfer Hub site due to the relatively dense nature of the granular soils encountered and absence of shallow groundwater (Verdantas, 2025, p. 10). Impacts would be less than significant.

iv) Landslides?

No Impact

Hydrogen Fueling Station and Transfer Hub

The project sites are nearly flat, and project development would not exacerbate landslide hazards. No impact would occur.

b) Would the project result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact

Hydrogen Fueling Station and Transfer Hub

Construction

The project sites would be most susceptible to erosion during the construction phase, when soil is exposed, and before landscaped areas have been installed. To minimize the potential for water and wind erosion, VVTA would have Stormwater Pollution Prevention Plans (SWPPPs) prepared and implemented for each project. The SWPPPs would prescribe construction BMPs to be implemented for the projects.

Four of the six categories of construction BMPs address soil erosion: erosion control (prevents soil particles from being detached from soil surface), sediment control (prevents soil particles from being transported offsite by water and being deposited elsewhere), wind erosion control, and tracking control (prevents soil from being tracked offsite by vehicles). SWPPPs are discussed further in **Section 4.10**). Construction impacts regarding soil erosion would be less than significant after preparation and implementation of SWPPPs.

Operation

At project completion the project would consist of buildings and equipment pads, hardscape including parking lots and bus bays, and landscaping. Some bare soil would still be present, for instance, in portions of the fueling station. Thus, erosion potential during project operation would be less than existing conditions.

With the implementation of soil erosion and sedimentation BMPs during the construction phase and the proposed combination of impervious and landscaped surfaces during the operational phase, the project would have less than significant impacts related to soil erosion or loss of topsoil and mitigation is not proposed.

c) Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less than Significant Impact

The HFS site is underlain by silty sand or clayey sand above well-graded sand; the depth between the two layers varies (Terracon, 2024, p. 4).

The HTH site is underlain by young alluvial fan deposits (Qyf) within the western region of the site and very old alluvial fan deposits (Qvof) within the eastern region of the site. Alluvial soils encountered within the exploratory borings drilled onsite generally consisted of sands to silty sands down to 35 feet below ground surface (bgs). From 35 feet to the maximum drilled depth of 51.5 feet bgs, alluvial soils consisted of silts and silts with sand with an interbed layer of silty sand at 45 feet (Verdantas, 2025, p. 6).

Lateral Spreading

Lateral spreading is the rapid downslope movement of surface sediment, in a fluid-like flow, due to liquefaction in a subsurface layer.

Hydrogen Fueling Station

The potential for lateral spreading is considered low due to the low potential for liquefaction in subsurface site soils (Terracon, 2024, p. 7).

Transfer Hub

Due to the absence of shallow groundwater (≤50 feet bgs), lateral spread is not a significant hazard at the HTH site (Verdantas, 2025, p. 10).

Collapsible Soils

Collapsible soils shrink upon being wetted and/or being subject to a load.

Hydrogen Fueling Station

Testing of a sample of soil determined that the soil has slight collapse potential (Terracon, 2024, p. 4). The geotechnical engineering report for the fueling station recommends that existing soils be removed and replaced with engineered fill soil to a depth of one foot below the bottom of foundations, or three feet below existing grade, whichever is greater (Terracon, 2024, p. 10).

Transfer Hub

The geotechnical exploration for the transfer hub concluded that soils under the transfer hub site have moderate collapse potential (Verdantas, 2025, p. 6). The geotechnical exploration for the transfer hub site recommends that existing soil be removed and replaced with engineered fill soil to a depth of two feet below the bottom of proposed footings or four feet below existing grade, whichever is greater (Verdantas, 2024, p. 12).

Subsidence

Hydrogen Fueling Station and Transfer Hub

The major cause of ground subsidence is the excessive withdrawal of groundwater. Soils with high silt or clay content are particularly susceptible to subsidence. The project site is not in an area of subsidence mapped by the USGS (USGS, 2025). Project development would not exacerbate hazards related to ground subsidence.

d) Would the project be located on expansive soil, as defined in Table 18-1 B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Less than Significant Impact

Expansive soils shrink and swell with changes in soil moisture. Soil moisture may change from landscape irrigation, rainfall, and utility leakage.

Hydrogen Fueling Facility

Tests of two samples of subsurface site soils yielded expansion pressure of zero (Terracon, 2024, *Exploration and Laboratory Results*). Expansion pressure is the pressure of expansion in a soil sample when the sample is saturated with water in a laboratory test (Idaho DOT, 2017). Project development would not exacerbate hazards related to expansive soils, and impacts would be less than significant.

Transfer Hub

A test of subsurface site soil yielded an expansion index of zero; such soils were determined to have very low (negligible) expansion potential (Verdantas, 2025, p. 6). Project development would not aggravate hazards related to expansive sols, and impacts would be less than significant.

e) Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact

Hydrogen Fueling Station and Transfer Hub

The proposed project includes a septic tank system for the restroom and other plumbing fixtures in the Transfer Hub that would be adequately supported by existing soils and site condition. The proposed fueling station project does not include restrooms or other fixtures that would generate wastewater. Thus, no impacts associated with septic tanks or alternative wastewater disposal systems would occur.

f) Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less than Significant Impact with Mitigation Incorporated

Hydrogen Fueling Station and Transfer Hub

The proposed project sites are underlain by young alluvial fan deposits of silt and sand (USGS 2006). A paleontological records search by the Los Angeles County Museum of Natural History yielded records of several fossil localities in the Victor Valley, as listed below in **Table 4.7-1**. Fossils discovered in the project region include those of the camel family (Camelidae); horse, antelope, and mole (Bell, 2025, p. 1). Fossils could be present in site sediments (Bell, 2025, p. 2). Project ground-disturbing activities could damage fossils. This impact would be potentially significant unless mitigated. Therefore, Mitigation measure **GEO-1** would be required.

Table 4.7-1
FOSSIL LOCALITIES IN THE PROJECT REGION
Identified in Los Angeles County Museum of Natural History Records Search

Locality	Location	Formation	Taxa	Depth, feet below ground surface
LACM VP 1224	North of Hesperia, near Dean Ave. & Dean Place	Shoemaker Gravel Formation	Camel family (Camelidae)	Unknown
LACM VP 3352	West bank of the Mojave River, north end of Victorville (more precise locality not available)	Shoemaker Gravel Formation	Horse (*Equus*)	Unknown
LACM VP 3353	Second Street at sand & gravel pit; near top of bluff, west bank of Mojave River	Shoemaker Gravel Formation	Horse (*Equus*)	Unknown
LACM VP 3498	West of Portland Cement Co. plant in bluffs on west side of Mojave River, midway between I-15 and Air Expressway Rd.	Shoemaker Gravel Formation	Horse (*Equus*); deer (Cervidae); antelope (Antilocapridae)	Unknown
LACM VP 7786	Southern California Logistics Airport	Alluvium (Pleistocene, moderately indurated fine to medium grained silty	Vole (*Microtus mexicanus*)	10-11 ft bgs

Source: Bell, 2025

Mitigation Measure

MM GEO-1 Prior to the issuance of a grading permit, VVTA shall retain the services of a qualified paleontologist for the project. During construction, should paleontological resources be encountered, the paleontologist shall develop, as needed, a Paleontological Resources Impact Mitigation Plan (PRIMP) to mitigate the potential impacts to unknown buried paleontological resources that may exist onsite for the review and approval by the appropriate authority. The PRIMP shall require that the paleontologist perform paleontological monitoring of any ground disturbing activities within undisturbed native sediments during mass grading, site preparation, and underground utility installation. The project paleontologist may reevaluate the necessity for paleontological monitoring after 50 percent or greater of the excavations have been completed.

In the event paleontological resources are encountered, ground-disturbing activity within 50 feet of the area of the discovery shall cease. The paleontologist shall examine the materials encountered, assess the nature and extent of the find, and recommend a course of action to further investigate and protect or recover and salvage those resources that have been encountered. Criteria for discarding specific fossil specimens will be made explicit. If the qualified paleontologist determines that impacts to a sample containing significant paleontological resources cannot be avoided by project planning, then recovery may be applied. Actions may include recovering a sample of fossiliferous material prior to construction, monitoring work and halting construction if a significant fossil needs to be recovered, and/or cleaning, identifying, and cataloging specimens for curation and research purposes. Recovery, salvage and treatment shall be done at VVTA's expense. All recovered and salvaged resources shall be prepared to the point of identification and permanent preservation by the paleontologist. Resources shall be identified and curated into an established accredited professional repository. The paleontologist shall have a repository agreement in hand prior to initiating recovery of the resource.

Level of Significance After Mitigation

With implementation of **MM GEO-1**, potential impacts to paleontological resources would be reduced to a less than significant level.

4.8 Greenhouse Gas Emissions

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

4.8.1 Background Information on Greenhouse Gas Emissions

Life on earth depends on energy coming from the sun. About half the light reaching Earth's atmosphere passes through the air and clouds to the surface, where it is absorbed and then radiated upward in the form of infrared heat. About 90 percent of this heat is then absorbed by carbon dioxide (CO_2) and other greenhouse gases (GHG) and radiated back toward the surface, which is warmed to a life-supporting average of 59 degrees Fahrenheit (°F) (NASA, 2018).

Human activities are changing the natural greenhouse. Over the last century, the burning of fossil fuels such as coal and oil has increased the concentration of atmospheric CO_2. This happens because the coal or oil burning process combines carbon in the fuel with oxygen in the air to make CO_2. To a lesser extent, the clearing of land for agriculture, industry, and other human activities has increased concentrations of GHGs (NASA, 2018).

GHGs are defined under the California Global Warming Solutions Act of 2006 (AB 32) as CO_2, methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulfur hexafluoride (SF_6).[7]

Associated with each GHG species is a "global warming potential" (GWP), which is a value used to compare the abilities of different GHGs to trap heat in the atmosphere. GWPs are based on the heat-absorbing ability of each gas relative to that of CO_2, as well as the decay rate of each gas (the amount removed from the atmosphere over a given number of years). The GWPs of CH_4 and N_2O are 25 and 298, respectively (GMI, 2019). "Carbon dioxide equivalent" (CO_2e) emissions are calculated by weighting each GHG compound's emissions by its GWP and then summing the products. HFCs, PFCs, and SF_6 would not be emitted in significant amounts by VVTA Hydrogen Fueling Station and Hesperia Transfer Hub Projects (project) sources, so they are not discussed further.

Carbon Dioxide (CO_2). Carbon dioxide is a colorless, odorless gas consisting of molecules made up of two oxygen atoms and one carbon atom. CO_2 is produced when an organic carbon compound (such as wood) or fossilized organic matter (such as coal, oil, or natural gas) is burned in the presence of oxygen. Since the industrial revolution began in the mid-1700s, industrial activities have increased in scale and distribution. Prior to the industrial revolution, CO_2 concentrations were stable at a range

[7] http://www.leginfo.ca.gov/pub/05-06/bill/asm/ab_0001-0050/ab_32_bill_20060927_chaptered.pdf.

of 275 to 285 ppm (IPCC, 2007a). The National Oceanic and Atmospheric Administration's Earth System Research Laboratory indicates that global concentration of CO_2 was 413.67 parts per million (ppm) in March 2020 (ESRL, 2020). These concentrations of CO_2 exceed by far the natural range over the last 650,000 years (180 to 300 ppm) as determined from ice cores.

Methane (CH_4). Methane is a colorless, odorless non-toxic gas consisting of molecules made up of four hydrogen atoms and one carbon atom. CH_4 is combustible, and is the main constituent of natural gas, a fossil fuel. CH_4 is released when organic matter decomposes in low oxygen environments. Natural sources include wetlands, swamps and marshes, termites, and oceans. Anthropogenic sources include the mining of fossil fuels and transportation of natural gas, digestive processes in ruminant animals such as cattle, rice paddies, and the buried waste in landfills. Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of CH_4. Other anthropogenic sources include fossil-fuel combustion and biomass burning.

Nitrous Oxide (N_2O). Nitrous oxide is a colorless, non-flammable gas with a sweetish odor, commonly known as "laughing gas," and sometimes used as an anesthetic. N_2O is naturally produced in the oceans and in rainforests (USEPA, 2019b). Manmade sources of N_2O include the use of fertilizers in agriculture, nylon and nitric acid production, cars with catalytic converters and the burning of organic matter. Concentrations of N_2O also began to rise at the beginning of the industrial revolution.

4.8.2 Regulatory Setting

GHGs are regulated at the national, state, and air basin level; each agency has a different degree of control. The United States Environmental Protection Agency (USEPA) regulates at the national level; the California Air Resources Board (ARB) regulates at the state level; and the Mojave Desert Air Quality Management District (MDAQMD) regulates at the air basin level in the proposed project area.

4.8.2.1 Federal Regulations

The USEPA collects several types of GHG emissions data. These data help policy makers, businesses, and the USEPA track GHG emissions trends and identify opportunities for reducing emissions and increasing efficiency. The USEPA has been maintaining a national inventory of GHG emissions since 1990 and in 2009 established mandatory reporting of GHG emissions from large GHG emissions sources.

EPA is also getting GHG reductions through partnerships and initiatives; evaluating policy options, costs, and benefits; advancing the science; partnering internationally and with states, localities, and tribes; and helping communities adapt.

Corporate Average Fuel Economy (CAFE) Standards

The National Highway Traffic Safety Administration's (NHTSA) Corporate Average Fuel Economy (CAFE) standards regulate the distance vehicles must cover per gallon of fuel. The agency establishes CAFE standards for passenger cars and light trucks (referred to as light-duty vehicles), as well as separate guidelines for fuel consumption by medium- and heavy-duty trucks and engines. The latest CAFE standards were proposed by the NHTSA in July 2023 and finalized in June 2024 (NHTSA, 2023). Effective August 23, 2024, passenger cars and light trucks will see an increase of two percent annually for passenger cars in model years 2027–2031. For light trucks, the increase will be zero percent per

year for model years 2027–2028 and two percent per year for model years 2029–31. Additionally, NHTSA is setting final fuel efficiency standards for heavy-duty pickup trucks and vans (HDPUVs) with a 10 percent annual increase for model years 2030–32 and further increases for model years 2033–35.

Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule

On March 31, 2020, the USEPA and the NHTSA published the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program, revoked California's authority to set its own GHG emissions standards and set zero emission vehicle (ZEV) mandates in California. The loss of the ZEV sales requirements would likely result in additional gasoline-fueled vehicles being sold in the State and increased criteria pollutant emissions. On April 30, 2020, during the first Trump administration, USEPA and NHTSA issued the Final SAFE Rule (NHTSA, 2021), which relaxed the federal GHG emissions and CAFE standards and would probably have resulted in increased CO_2 emissions. However, this regulation was repealed on December 21, 2021 by the Biden administration (USEPA, 2024).

4.8.2.2 State Regulations

Executive Order (EO) S 305

On June 1, 2005, the governor issued EO S 305, which set the following GHG emission reduction targets:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

To meet these targets, the Climate Action Team (CAT) prepared a report to the Governor in 2006 that contained recommendations and strategies to help ensure that the targets in EO S 305 are met.

Assembly Bill 32 (AB 32)

In 2006, the California State Legislature enacted the California Global Warming Solutions Act of 2006, also known as AB 32. AB 32 focuses on reducing GHG emissions in California. It required that GHGs emitted in California be reduced to 1990 levels by the year 2020. The ARB is the state agency charged with monitoring and regulating sources of emissions of GHGs that cause global warming. AB 32 also required that by January 1, 2008, the ARB determine what the statewide GHG emissions level was in 1990, and that it approve a statewide GHG emissions limit, so it may be applied to the 2020 benchmark. The ARB approved a 1990 GHG emissions level of 427 million metric tons of CO_2e (MMTCO2e), on December 6, 2007, in its Staff Report. Therefore, in 2020, emissions in California were required to be at or below 427 $MMTCO_2e$.

Under the "business as usual or (BAU)" scenario established in 2008, statewide emissions were increasing at a rate of approximately one percent per year, as noted below. It was determined that the 2020 estimated BAU of 596 $MMTCO_2e$ would have required a 28 percent reduction to reach the 1990 level of 427 $MMTCO_2e$.

As part of the 2013 update, the ARB revised the 2020 Statewide limit to 431 million MT of CO_2e, an approximately one percent increase from the original estimate. The 2020 business-as-usual forecast

in the update is 509 million MT of CO_2e. The state would need to reduce those emissions by 15.3 percent to meet the 431 million MT of CO_2e 2020 limit. The state met this goal years earlier than intended and efforts are now focused on achieving goals set by the 2022 Scoping Plan update discussed below.

Climate Change Scoping Plan

The first AB 32 Scoping Plan (ARB, 2008) contained the main strategies to achieve the 2020 emissions cap. These included direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system.

In December 2022, the ARB approved its Final 2022 Scoping Plan Update (ARB, 2022), which adds carbon neutrality to the former Scoping Plan and identifies a technologically feasible, cost-effective path to reduce GHG emissions by 85 percent below 1990 levels and achieve carbon neutrality by 2045 or earlier. The 2022 Plan focuses on efforts to shift away from fossil fuels; this would result in a 94 percent decrease in liquid petroleum demand, a 71 percent decrease in smog-related pollutants, a job increase of four million, and $200 billion of health cost savings for Californians (ARB, 2022).

Renewables Portfolio Standard (Scoping Action E3)

The California Energy Commission estimates that in 2000 about 12 percent of California's retail electric load was met with renewable resources. Renewable energy includes (but is not limited to) wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas. California's current RPS is intended to increase that share to 44 percent by 2024. Increased use of renewables will decrease California's reliance on fossil fuels, thus reducing emissions of GHGs from the electricity sector. Governor Brown signed Senate Bill (SB) 350 in October 2015, which requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from eligible renewable energy resources by 2030.

Senate Bill 375 (SB 375)

Senate Bill (SB) 375 passed the Senate on August 30, 2008, and was signed by the governor on September 30, 2008. Per SB 375, the transportation sector is the largest contributor of GHG emissions and contributes approximately 45 percent of the GHG emissions in California, with automobiles and light trucks alone contributing almost 30 percent. SB 375 indicates that GHGs from automobiles and light trucks can be reduced by new vehicle technology. However, significant reductions from changed land use patterns and improved transportation also are necessary. SB 375 states, "Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32." SB 375 (1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions; (2) aligns planning for transportation and housing; and (3) creates specified incentives for the implementation of the strategies.

Executive Order B-30-15

On April 29, 2015, the governor issued Executive Order B-30-15, which added an interim target of GHG emissions reductions to help ensure the State meets its 80 percent reduction by 2050, as set in EO S-3-05. The interim target is to reduce GHG emissions by 40 percent by 2030. It also directs state agencies to update the Scoping Plan, update an Adaptation Strategy every three years, and take

climate change into account in their planning and investment strategies. Additionally, it requires the state's Five-Year Infrastructure Plan to take current and future climate change impacts into account in all infrastructure projects**.**

Title 24

Although not originally intended to reduce GHGs, California Code of Regulations Title 24 Part 6: California's Building Energy Efficiency Standards for Residential and Nonresidential Buildings, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy-efficient technologies and methods. The California Energy Commission updates the standards every three years. The 2025 standard, which will go into effect effective January 1, 2026, encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more (CEC, 2025).

Innovative Clean Transit (ICT) Regulation

The Innovative Clean Transit (ICT) Regulation, adopted by the ARB in December 2018, mandates public transit agencies to fully transition fleets to Zero-Emission buses (ZEB), with a goal for full transition by 2040. All buses with a gross vehicle weight rating (GVWR) higher than 14,000 pounds that are purchased by transit agencies after 2029 must be ZEBs. This regulation also requires the purchasing of low-NO_x engines unless the buses operate out of areas that are exempt from NO_x regulations, large transit agencies to use renewable diesel or renewable natural gas and for agencies to maintain proper records and submit regular reports (ARB, 2019).

4.8.2.3 Local Regulations

4.8.2.4 The Mojave Desert Air Quality Management District (MDAQMD)

The Mojave Desert Air Quality Management District maintains a set of rules and regulations to improve and maintain healthy air quality for the entire population within its jurisdiction. When developing new regulations, the MDAQMD must comply with complex procedures established by statutes in federal and state codes. Its regulations development process is based on the specific nature of the regulation and its potential impacts.

City of Hesperia

City of Hesperia Climate Action Plan (CAP)

In compliance with Goal CN-7 in the City's General Plan (City of Hesperia, 2019a), the City of Hesperia prepared a climate action plan (CAP) with the coordination of regional councils of government, and it was approved in July 2010 (Michael Brandman Associates, 2010b). The CAP strategy is primarily based upon the land use, transportation, and conservation policies that are part of the General Plan Update, recent specific plans, and major development plans in the City. The concept is that design, density, and pattern of land uses impact the amount people drive and the options available for using less polluting and energy-consuming modes of transportation such as walking, bicycling, and transit. The plans also promote energy efficiency in buildings, government operations, and through more efficient water use. Implementing these plans helps ensure that the city will be developed in ways that produce fewer greenhouse gas emissions.

This CAP identifies policies within the City of Hesperia General Plan Update that would decrease the City's emissions of greenhouse gases. This CAP also lists implementation strategies that add more details and specific actions to the General Plan policies and clarify how the reductions would occur. This CAP demonstrates that the General Plan Update policies and CAP strategies would reduce emissions to the reduction target. The CAP includes strategies in the following categories:

- CEQA compliance.
- Parking measures.
- Mixed use development.
- Energy efficiency.
- Transit oriented development.
- Water conservation and reuse.
- Compact development.
- Waste reduction and recycling.
- Pedestrian connections.
- Regional cooperation.
- Bicycle infrastructure.
- Governmental operation

The City of Hesperia's updated General Plan (City of Hesperia, 2019a) includes goals and policies in several elements that aim to reduce GHG emissions and energy consumption by:

Goal: CN-6 Provide programs and incentives to encourage residents, businesses and developers to reduce consumption and efficiently use energy resources.

Implementation Policy CN-6.1: Develop a green building program in the City to educate the development community and promote the conservation of natural resources.

Implementation Policy CN-6.2: Encourage the use of green building standards and Leadership in Energy and Environmental Design (LEED) or similar programs in both private and public projects.

Implementation Policy CN-6.3: Provide incentives like technical assistance and low interest loans for projects that are energy efficient and contain energy conservation measures

Implementation Policy CN-6.4: Educate the public about energy conservation techniques.

Implementation Policy CN-6.5: Coordinate with the local energy provider in developing policies and procedures to reduce energy consumption in existing and future developments.

Implementation Policy CN-6.6: Encourage residents and businesses to utilize the incentives provided by the local energy providers to retrofit their buildings and businesses for energy efficiency and conservation.

Implementation Policy CN-6.7: Continue the existing recycling program and utilization of the material recovery facility program while exploring additional methods of reducing waste.

Goal: CN-7 Develop, promote and implement policies to reduce and limit Greenhouse Gas Emissions.

Implementation Policy CN-7.1: Coordinate with the regional councils of government in developing appropriate regional climate action policies.

Implementation Policy CN 7.2: In conjunction with regional councils of government, prepare and implement a city climate action plan.

Implementation Policy CN-7.3: Coordinate with neighboring cities and public jurisdictions in the preservation of air quality resources.

Implementation Policy CN-7.4: Promote the utilization of alternative energy resources such as wind and solar in new development.

Implementation Policy CN 7.5: Promote the utilization of environmentally sensitive construction materials to limit impacts on the ozone, global climate change and mineral resources.

Implementation Policy CN 7.6: Preserve land resources for the utilization of energy resources, including wind and solar energy resources.

Implementation Policy CN 7.7: Promote energy conservation through site layout, building design, natural light and efficient mechanical and electrical products in development.

Implementation Policy CN 7.8: Continue the existing recycling program and utilization of the material recovery facility program while exploring additional methods of reducing waste.

Implementation Policy CN 7.9: Promote sustainable principles in development that conserves such natural resources as air quality and energy resources.

4.8.3 GHG Emissions

4.8.3.1 National Emissions

The United States is the second largest emitter of GHGs globally (behind China) and emitted approximately 6.3 billion metric tons of CO_2 equivalent ($MTCO_2e$) in 2022 (EPA, 2022). The largest source of GHG in the United States (28 percent) comes from burning fossil fuels for the transportation sector. Electrical power generation accounted for the second largest portion (25 percent). The remaining 47 percent of U.S. GHG emissions were contributed by the industrial, commercial, agricultural and residential sectors (EPA, 2022).

4.8.3.2 State Emissions

California's GHG emissions in 2022 totaled 371.1 million metric tons of CO_2e ($MMTCO_2e$) (ARB, 2024). The transportation sector accounts for the largest percentage of GHG emissions (39 percent) and the industrial sector accounts for the second largest percentage (23 percent) (ARB, 2022). The remaining GHG emissions came from in-state and imported electricity, agriculture, commercial and residential sectors.

4.8.3.3 Local Emissions

The CAP's purpose is to (1) navigate the city government and Hesperia community towards a 29 percent per capita GHG emissions reduction by 2020 while adapting to climate change effects, and (2) guide the city staff on the implementation of key provisions of the CAP with a monitoring framework. The City of Hesperia CAP shows existing and projected GHG emissions. The city's existing (2009) community-wide GHG emissions were 0.639 $MMTCO_2e$ and its projected 2020 and buildout year (2030) inventories were 0.955 $MMTCO_2e$ and 1.256 $MMCO_2e$, respectively. **Table 4.8-1** shows the results of the community-wide baseline inventory, the projected 2020 inventory, and the projected buildout inventory. The emissions forecast estimates future emissions under a Business as Usual (BAU) scenario. The BAU scenario assumes that no special effort has been made to reduce GHG emissions. Therefore, the future emissions depicted in **Table 4.8-1** present how GHG emissions may increase in Hesperia if no reduction programs are implemented.

Table 4.8-1
CITY OF HESPERIA COMMUNITY BUSINESS AS USUAL EMISSIONS

Community Sector	Greenhouse Gas Emissions ($MTCO_2e$ per year)		
	2009	2020	Buildout (2030)
Transportation: Automobiles, Light Duty Trucks, Medium Duty Trucks	199,414	249,365	302,008
Transportation: Heavy Duty Diesel Trucks	200,392	250,587	303,488
Transportation: Other	7,454	9,321	11,288
Natural Gas	34,507	87,734	136,118
Electricity	135,824	233,019	321,378
Solid Waste	28,394	48,713	67,184
Wood Burning Fireplaces and Stoves	9,528	16,073	22,023
Refrigerants	23,906	59,836	92,825
Total	**639,419**	**954,648**	**1,256,312**
Population	102,896	176,527	243,456
Per Capita Emissions	6.2	5.4	5.2

Source: City of Hesperia, 2010b.

4.8.4 Impact Thresholds

CEQA Guidelines §15064.4 provides discretion to the lead agency whether to: (1) use a model or methodology to quantify GHG emissions resulting from a project, and which model or methodology to use; or (2) rely on a qualitative analysis or performance-based standards. In addition, CEQA does not provide guidance to determine whether the project's estimated GHG emissions are significant, but recommends that lead agencies consider several factors that may be used in the determination of significance of project-related GHG emissions, including:

- The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting.
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.

- The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

CEQA Guidelines § 15130(f) states that the effects of GHG emissions are by their very nature cumulative and should be analyzed in the context of CEQA's requirements for cumulative impact analysis. Additionally, CEQA Guidelines § 15064(h)(3) states that a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides requirements to avoid or lesson the cumulative problem.

The MDAQMD has established thresholds of significance for GHG emissions, applicable to both construction and operations regardless of whether they are stationary or mobile sources. The MDAQMD's GHG emissions thresholds are 548,000 pounds per day (lbs/day) CO_2e or 100,000 $MTCO_2e$ per year. However, to provide a more conservative analysis, the City recommends evaluating the Project's GHG emissions against the South Coast Air Quality Management District 's (SCAQMD's) GHG thresholds. For purposes of conservative analysis and consistency, VVTA concurs with this recommendation for evaluating GHG impacts associated with the proposed project.

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, the SCAQMD convened a GHG CEQA Significance Threshold Working Group (Working Group). At the Working Group meeting #15 (SCAQMD, 2010), SCAQMD staff proposed adopting a tiered approach for evaluating GHG emissions for development projects where the SCAQMD is not the lead agency:

- **Tier 1. Exemptions:** If a project is exempt from CEQA, project-level and cumulative GHG emissions are less than significant.
- **Tier 2. Consistency with a Locally Adopted GHG Reduction Plan:** If the project complies with a GHG emissions reduction plan or mitigation program that avoids or substantially reduces GHG emissions in the project's geographic area (i.e., city or county), project-level and cumulative GHG emissions are less than significant.
- **Tier 3. Numerical Screening Threshold:** If GHG emissions are less than the numerical screening level threshold, project-level and cumulative GHG emissions are less than significant. For projects that are not exempt or where no qualifying GHG reduction plans are directly applicable, the SCAQMD requires an assessment of GHG emissions. The SCAQMD, under Option 1, proposed land use-specific thresholds: 1,400 $MTCO_2e$ for commercial projects; 3,500 MT CO_2e for residential projects; or 3,000 $MTCO_2e$ for mixed-use industrial projects. Option 2 was a "bright-line" screening-level threshold of 3,000 $MTCO_2e$ per year for all land use types.[8]
- **Tier 4. Performance Standards:** If emissions exceed the numerical screening threshold, a more detailed review of the project's GHG emissions is warranted. The SCAQMD has proposed an efficiency target for projects that exceed the bright-line threshold. The current recommended approach is per-capita efficiency targets. The SCAQMD is not recommending use of a percentage emissions reduction target. Instead, the SCAQMD proposed a 2020 efficiency target of 4.8 $MTCO_2e$ per year per service population for project-level analyses and

[8] The 3,000-$MTCO_2e$ threshold is discussed in detail below.

6.6 $MTCO_2e$ per year per service population for plan-level projects (e.g., program-level projects such as General Plans).

The 3,000-$MTCO_2e$-per-year threshold is based on a 90 percent emission "capture" rate methodology. A 90 percent emission capture rate means that, for a specific geographic area, new facilities whose unmitigated emissions exceed the threshold would account for more than 90 percent of all new unmitigated GHG emissions (Smith and Krause, 2008, p. 3-15). Projects whose emissions exceed the threshold would be subject to a detailed analysis of potential environmental impacts from GHG emissions, while those whose emissions are below the threshold would be excluded from detailed analysis. A GHG significance threshold based on a 90 percent emission capture rate is appropriate to address the long-term adverse impacts associated with global climate change because medium and large projects will be required to implement measures to reduce GHG emissions, while small projects, which are generally infill development projects that are not the focus of the State's GHG reduction targets, are allowed to proceed. Further, a 90 percent emission capture rate sets the emission threshold low enough to capture a substantial proportion of future development projects and demonstrate that cumulative emissions reductions are being achieved while setting the emission threshold high enough to exclude small projects that will, in aggregate, contribute approximately one percent of projected statewide GHG emissions in 2050.

The City understands that the 3,000-$MTCO_2e$/yr threshold for residential/commercial uses was proposed by SCAQMD a decade ago and was adopted as an interim policy; however, no permanent, superseding policy or threshold has since been adopted. The 3,000-$MTCO_2e$/yr threshold was developed and recommended by SCAQMD, an expert agency, based on substantial evidence as provided in the Draft Guidance Document – Interim CEQA Greenhouse Gas Significance Threshold document (Smith and Krause, 2008) and subsequent Working Group meetings (the latest of which occurred in 2010). The SCAQMD has not withdrawn its support of the interim threshold and all documentation supporting the interim threshold remains on the SCAQMD website on a page that provides guidance to CEQA practitioners for air quality analysis (and where all SCAQMD significance thresholds for regional and local criteria pollutants and toxic air contaminants also are listed). Further, as stated by the SCAQMD, this threshold "uses the Executive Order S-3-05 goal [80% below 1990 levels by 2050] as the basis for deriving the screening level" and, thus, remains valid for use now. Lastly, this threshold has been used for hundreds, if not thousands of GHG analyses performed for projects located within the SCAQMD jurisdiction. Thus, for purposes of this analysis, if project-related GHG emissions do not exceed the 3,000-$MTCO_2e$/year threshold, then project-related GHG emissions would clearly have a less than significant impact. On the other hand, if project-related GHG emissions exceed 3,000 MTCO2e/yr, the project would be considered a substantial source of GHG emissions.

Based on the foregoing guidance, the City of Hesperia has elected to rely on compliance with a local air district threshold in the determination of significance of project-related GHG emissions. Specifically, the City has selected the interim 3,000 $MTCO_2e$/yr threshold recommended by SCAQMD staff for residential and commercial sector projects against which to compare project-related GHG emissions. Consistent with the above, this VVTA project analysis utilizes the SCAQMD recommended thresholds in t his Initial Study.

4.8.5 Impact Analysis

4.8.5.1 Methodology

Short-term construction GHG emissions and long-term operational GHG emissions were assessed using the California Emissions Estimator Model (CalEEMod) Version 2022.1.1.29 (CAPCOA, 2022). This analysis focused upon emissions of CO_2, CH_4, N_2O and CO_2e only.

a) Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Less than Significant Impact

California has enacted several pieces of legislation that relate to GHG emissions and climate change, many of which set aggressive goals for GHG reductions within the state. Per Senate Bill 97, the California Natural Resources Agency adopted amendments to the CEQA Guidelines, which address the specific obligations of public agencies when analyzing GHG emissions under CEQA to determine a project's effects on the environment. However, neither a threshold of significance nor any specific mitigations are included or provided in these CEQA Guideline amendments.

GHG Significance Threshold

As noted above, the City of Hesperia has set 3,000 metric tons of CO_2e per year as its significant emissions threshold for GHG.

Construction GHG Emissions

Construction is an episodic, temporary source of GHG emissions. Emissions are generally associated with the operation of construction equipment and the disposal of construction waste. As explained by the California Air Pollution Control Officers Association (CAPCOA) in its 2008 white paper (CAPCOA, 2008), the information needed to characterize GHG emissions from manufacture, transport, and end-of-life of construction materials would be speculative at the CEQA analysis level. CEQA does not require an evaluation of speculative impacts (*CEQA Guidelines* § 15145). Therefore, the construction analysis does not consider such GHG emissions, but does consider non-speculative onsite construction activities, and offsite hauling, and construction worker trips. All GHG emissions are identified on an annual basis.

Estimated GHG emissions from the proposed project's onsite and offsite project construction activities were calculated using CalEEMod, Version 2022.1.1.29. The results of the analysis are presented in **Table 4.8-2**. The GHG emissions from the Hydrogen Fueling Station and Hesperia Transfer Hub Project's construction activities would be **907.28 metric tons of CO_2e**. This is below the annual threshold of 3,000 metric tons per year. Thus, GHG impacts from construction are considered individually less than significant.

Table 4.8-2
PROJECT CONSTRUCTION-RELATED GHG EMISSIONS

Year	Annual Emissions (metric tons)			
	CO_2	CH_4	N_2O	CO_2e
Transfer Hub				
2025	191.70	0.01	0.00	193.11
2026	656.80	0.02	0.01	660.27
Total	**848.5**	**0.03**	**0.01**	**853.38**
Hydrogen Fueling Station				
2025	18.00	0.001	0.00	18.08
2026	35.64	0.001	0.00	35.82
Total	**53.64**	**0.002**	**0.00**	**53.9**
Combined Emissions				
2025	209.7	0.011	0	211.19
2026	692.44	0.021	0.01	696.09
Total	**902.14**	**0.032**	**0.01**	**907.28**
			Significance Threshold	*3,000*
			Significant? (Yes or No)	**No**

Source: SCAQMD

Operational GHG Emissions

Operational GHG emissions were calculated by using CalEEMod Version 2022.1.1.29 (CAPCOA, 2022). CalEEMod provides default assumptions regarding operational mobile sources based on standard fuel types—primarily gasoline, diesel, and natural gas—reflecting regional fleet characteristics derived from EMFAC data. However, CalEEMod does not currently account for hydrogen fuel cell technology in mobile sources.

As noted in the Victor Valley Transit Authority COA Final Report – June 2024 (VVTA, 2024), the project involves a planned transition to zero-emission buses (ZEBs) using hydrogen fuel cell technology. This transition includes the development of hydrogen fueling infrastructure in Barstow and Hesperia and represents a substantial shift from fossil-fuel-based transit operations to a zero-emission alternative. Because CalEEMod does not reflect this fuel substitution, the model's operational mobile source emissions outputs likely overestimate actual future greenhouse gas emissions from transit operations under the proposed project.

Therefore, the CalEEMod-based operational GHG emissions estimates represent a worst-case scenario, as the model assumes continued use of conventional fuels and does not account for the project's planned transition to hydrogen fuel cell technology. Actual GHG emissions are expected to

be lower, supporting consistency with state and regional clean energy goals. In sum, the CalEEMod results are considered to reflect a worst-case scenario for operational greenhouse gas emissions. These estimates are summarized in **Table 4.8-3**.

The amortized value of construction emissions for a 30-year period of **30.25 metric tons CO_2e** was added to the proposed project's annual operational GHG emissions. Total annual unmitigated emissions from the project would be **71.97 metric tons CO_2e**. Modeling results are provided in **Appendix B.**

Table 4.8-3
PROJECT OPERATIONAL GHG EMISSIONS

Emissions Source	Estimated Project-Generated GHG Emissions ($MTCO_2e$ per year)		
	Transfer Hub	Hydrogen Fueling Station	Combined Emissions
Mobile (Motor Vehicles)	29.59	0.00	29.59
Area Sources	0.75	0.09	0.84
Energy Demand (Electricity & Natural Gas)	7.51	0.98	8.49
Water Demand	1.55	0.23	1.78
Solid Waste Generation	0.52	0.50	1.02
Construction Emissions[a]	28.45	1.8	30.25
Total	**68.37**	**3.6**	**71.97**
		Significance Threshold	*3,000*
		Significant? (Yes or No)	**No**

SCAQMDa *Total construction GHG emissions were amortized over 30 years and added to those resulting from the operation of the project.*

Therefore, under the first significance criterion, GHG emissions would be less than significant, and no mitigation is required.

b) Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHG?

Less than Significant Impact

The City of Hesperia's CAP, as described in **Section 4.8.2,** has a goal of reducing community GHG emissions to a level that is 40 percent below its 2020 level of GHG emissions by 2030. The City will meet and exceed this goal subject to reduction measures that are technologically feasible and cost-effective through a combination of state (~70 percent) and local (~30 percent) efforts. The Pavley vehicle standards, the State's low carbon fuel standard, the Renewable Portfolio Standard (RPS), and other state measures will reduce GHG emissions in Hesperia's on-road, off-road, and building energy sectors in 2030.

The CAP has the following purposes (City of Hesperia, 2010b):

- Outline a course of action for the City government and the citizens of Hesperia to reduce per capita greenhouse gas emissions 29 percent below business as usual by 2020 and adapt to the effects of climate change.

- Provide clear guidance to City staff regarding when and how to implement key provisions of the CAP. This CAP sets out an implementation and monitoring framework for monitoring its strategies.

The CAP identifies policies within the City of Hesperia General Plan Update that would decrease the City's emissions of greenhouse gases. This CAP also lists implementation strategies that add more details and specific actions to the General Plan policies and clarify how the reductions would occur.

The project will comply with all relevant energy-reducing provisions of Title 24, Parts 6 and 11, which indirectly reduce GHG emissions by reducing energy use. Because the project will reduce GHGG emissions by replacing fossil fuel combustion with zero-emissions hydrogen fuel cells, it will not interfere with or conflict with any plan to reduce GHG emissions. Therefore, the project's GHG emissions impacts will be less than significant.

4.9 Hazards and Hazardous Materials

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			**X**	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			**X**	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one quarter mile of an existing or proposed school?			**X**	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			**X**	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				**X**
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			**X**	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				**X**

A Phase I Environmental Site Assessment (ESA) was prepared for each component of the project: the Transfer Hub (Phase I ESAa, UES, 2025a) and the Hydrogen Fueling Station (Phase I ESAb, UES, 2025b), both conducted by McGinley and Associates, Inc. dba UES and dated April 2, 2025 (see **Appendices F1** and **F2**). These assessments were conducted in accordance with the 2021 ASTM International Standard Practice for Phase I Environmental Site Assessments (ASTM E1527-21), which is recognized by the U.S. Environmental Protection Agency as meeting the requirements for All Appropriate Inquiry under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The Phase I ESAs evaluated the presence of Recognized Environmental Conditions (RECs), Controlled Recognized Environmental Conditions (CRECs), Historical Recognized Environmental Conditions (HRECs), Vapor Encroachment Conditions (VECs), and Business Environmental Risks (BERs). The findings of both assessments concluded that no RECs, CRECs, HRECs, VECs, or other environmental concerns were identified on the subject properties that would pose a significant hazard to the public or the environment (UES, 2025a/b).

a) Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than Significant Impact

The Phase I ESAs conducted for both components of the proposed project revealed no evidence of RECs, HRECs, CRECs, VECs, BERs, or significant data gaps existed on the proposed project site. The Phase I ESAs both concluded that no additional environmental investigation is warranted at this time (UES, 2025a/b).

The project includes the construction of a hydrogen fueling station, and all storage, handling, and dispensing of hydrogen fuel would be subject to applicable federal, state, and local safety regulations, including those enforced by the California Fire Code, California Building Standards Code, and local fire authority requirements. Compliance with these established safety protocols ensures that the routine transport, use, and storage of hydrogen fuel would not pose a significant hazard to the environment.

Additionally, most of Victor Valley Transit Authority's (VVTA) existing bus fleet is powered by compressed natural gas (CNG). As discussed in **Section 4.15**, the proposed transition to include hydrogen fueling infrastructure is not expected to result in a substantial increase in hazard to the public or environment. According to Safety Issues of Hydrogen in Vehicles (Barbir, 2012), hydrogen and natural gas present similar risk profiles when used as vehicular fuels. Key differences include:

- Hydrogen disperses more rapidly than natural gas in the event of a leak, reducing accumulation risks.
- Hydrogen's energy density is significantly lower than that of natural gas, which may reduce the severity of potential explosions.
- While hydrogen has a lower ignition energy and burns at 4 percent concentration in air (comparable to natural gas), its flame is less visible and produces less radiant heat, decreasing secondary ignition risks.
- In open-air scenarios, hydrogen is more likely to burn than explode due to its higher explosion threshold (13–18 percent) compared to natural gas.
- The explosive potential of hydrogen vapor is only 4.5 percent that of gasoline vapor for a given volume.

To mitigate any potential risks, project operations would include implementation of a Hydrogen Safety Action Plan (HSAP) prepared by Trillium, the contracted operator of the proposed Hydrogen Fueling Station (HFS). The HSAP includes specialized training for both VVTA staff and local emergency responders, incorporates industry-standard leak detection and automatic shutoff systems, and outlines protocols for managing hydrogen fires (which cannot be extinguished with water and require cessation of fuel flow). These design features and operational safeguards are consistent with applicable safety codes and ensure risk is minimized.

As such, operation of the HFS is not anticipated to pose a significant hazard to the public or the environment and impacts on emergency response resources such as those of the San Bernardino County Fire Protection District (SBCFPD) would be less than significant.

b) Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than Significant Impact

Construction

Project construction activities would involve the transport, storage, and use of hazardous materials such as fuels, solvents, paints, and other chemical agents typically associated with construction. These activities would be conducted in full compliance with applicable federal, state, and local regulations governing hazardous materials management, including the Resource Conservation and Recovery Act (RCRA); the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); the California Hazardous Waste Control Law (Health and Safety Code, Division 20, Chapter 6.5); regulations enforced by the Occupational Safety and Health Administration (OSHA) and the California Division of Occupational Safety and Health (Cal/OSHA); and oversight by the Mojave Desert Air Quality Management District (MDAQMD) and San Bernardino County Environmental Health Services. The construction contractor would be required to implement best management practices for hazardous material handling, including maintaining spill containment kits onsite and immediately reporting any significant release of hazardous materials to the appropriate regulatory agencies.

Through regulatory compliance and implementation of standard construction safety procedures, the potential for hazardous materials to pose a risk to human health or the environment during construction would be minimized. Therefore, impacts related to the routine transport, use, or disposal of hazardous materials would be less than significant.

Operation

During project operation, the hydrogen fueling station would involve the storage and dispensing of compressed or liquefied hydrogen fuel, which is classified as a flammable gas. However, the storage, handling, and dispensing of hydrogen would be conducted in strict compliance with applicable federal, state, and local regulations, including those administered by the U.S. Department of Transportation (DOT), California Fire Code, California Building Standards Code, and the California Air Resources Board (CARB). The fueling infrastructure would incorporate advanced safety features such as automatic shut-off valves, leak detection systems, and pressure relief mechanisms, and would be subject to regular inspections and maintenance in accordance with industry standards.

Similarly, the operation of the adjacent transit transfer hub may involve the limited use of routine maintenance and cleaning products (e.g., janitorial solvents, degreasers, and landscaping chemicals), all of which would be stored and handled in accordance with regulations enforced by the California DTSC, OSHA, and local fire and environmental health agencies. The quantities of such materials would be minimal and typical for public transit facility operations.

Collectively, the operational uses would not involve the handling or storage of hazardous materials in quantities that would pose a significant risk of release or endanger public health or safety. Therefore, impacts related to the operational use of hazardous materials would be less than significant.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less than Significant Impact

A review of publicly available data and City land use records confirms that there are no existing or proposed schools located within one-quarter mile of the project site. The nearest school is Juniper Elementary School, which is located approximately 1,514 feet (i.e., 0.26 mile) to the southeast of the transfer hub project site (refer to Figure 4.13-1), and more than one-quarter mile from the project site.

While the hydrogen fueling station component of the project would involve the onsite storage and dispensing of hydrogen fuel – a regulated flammable gas – its handling and use would be subject to stringent safety and containment standards under the California Fire Code, California Building Standards Code, and applicable DOT and OSHA regulations. Given the absence of nearby schools and the regulatory controls in place, the project would not emit hazardous emissions or handle acutely hazardous materials within 0.25 miles of an existing or proposed school. Impacts under this category will therefore be less than significant.

d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Less than Significant Impact

The project site, located at 17150 Smoke Tree Street in the City of Hesperia, was reviewed against the California Environmental Protection Agency's Cortese List, which identifies sites known to be associated with hazardous materials releases pursuant to Government Code § 65962.5 (see **Figure 4.9-1**). Based on a review of the most recent data from the DTSC, State Water Resources Control Board, and other applicable regulatory databases, the project site is not listed as a hazardous materials site. Additionally, the Phase I Environmental Site Assessments prepared for the site found no evidence of RECs or other environmental concerns that would suggest contamination. Therefore, the project would not be located on a hazardous materials site as defined under Government Code § 65962.5 and not create a significant hazard to the public or the environment. Impacts would be less than significant.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact

The project site is not located within an airport land use plan area and is not within two miles of any public airport or public use airport. The nearest airport facility, Hesperia Airport (L26), is located approximately 3.1 miles south of the project site, as shown in **Figure 4.9-2**.). As such, the project would not be subject to airport-related land use compatibility constraints and would not be exposed to aircraft overflight hazards or substantial airport-generated noise. Therefore, the project would not result in a safety hazard or expose workers or nearby sensitive receptors to excessive noise due to

proximity to a public airport. Therefore, there would be no impacts regarding an airport land use plan.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less than Significant Impact

Construction

The City of Hesperia adopted its current Local Hazard Mitigation Plan (LHMP) on May 6, 2025. As further discussed in **Section 4.17** of this Initial Study, construction activities associated with the project may require temporary work within the Smoke Tree Street public right-of-way adjacent to the project site. Such work could result in short-term lane reductions or partial closures. The City of Hesperia requires that any construction activity within a public roadway obtain an encroachment permit approved by the City Engineer. As a condition of approval, the City mandates that continuous access to fire hydrants, streets, driveways, and drive approaches be maintained at all times unless otherwise approved by the City Engineer. Emergency access must also be preserved throughout all construction phases. Compliance with these requirements, including preparation and implementation of appropriate traffic control and access management measures, would ensure that construction activities do not interfere with the implementation of the City's emergency response or evacuation plans. Therefore, the project would not impair or physically interfere with an adopted emergency response or evacuation plan, and impacts would be less than significant.

Operation

The proposed project would not impede implementation of, or physically interfere with, any adopted emergency response or evacuation plan. Project operations are not expected to obstruct vehicular circulation on Smoke Tree Street or adjacent roadways. The project has been designed to ensure compliance with emergency access standards, including those stipulated in California Fire Code §503, which governs fire apparatus access roads. Therefore, potential impacts related to emergency response and evacuation plans would be less than significant.

g) Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact

The project is located within a developed urban area and is not identified as being within or adjacent to a Very High Fire Hazard Severity Zone, as mapped by the California Department of Forestry and Fire Protection (CAL FIRE) and discussed in **Section 4.21** in detail. The project would not introduce new uses or structures into areas of elevated wildfire risk, nor would it impair existing emergency access or firefighting capabilities. Compliance with California Building Code Chapter 7A and California Fire Code regulations, including defensible space and access requirements, would further minimize potential exposure to fire hazards. Therefore, the project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires, and there would be no impact.

Figure 4.9-1
CORTESE ACT SITES

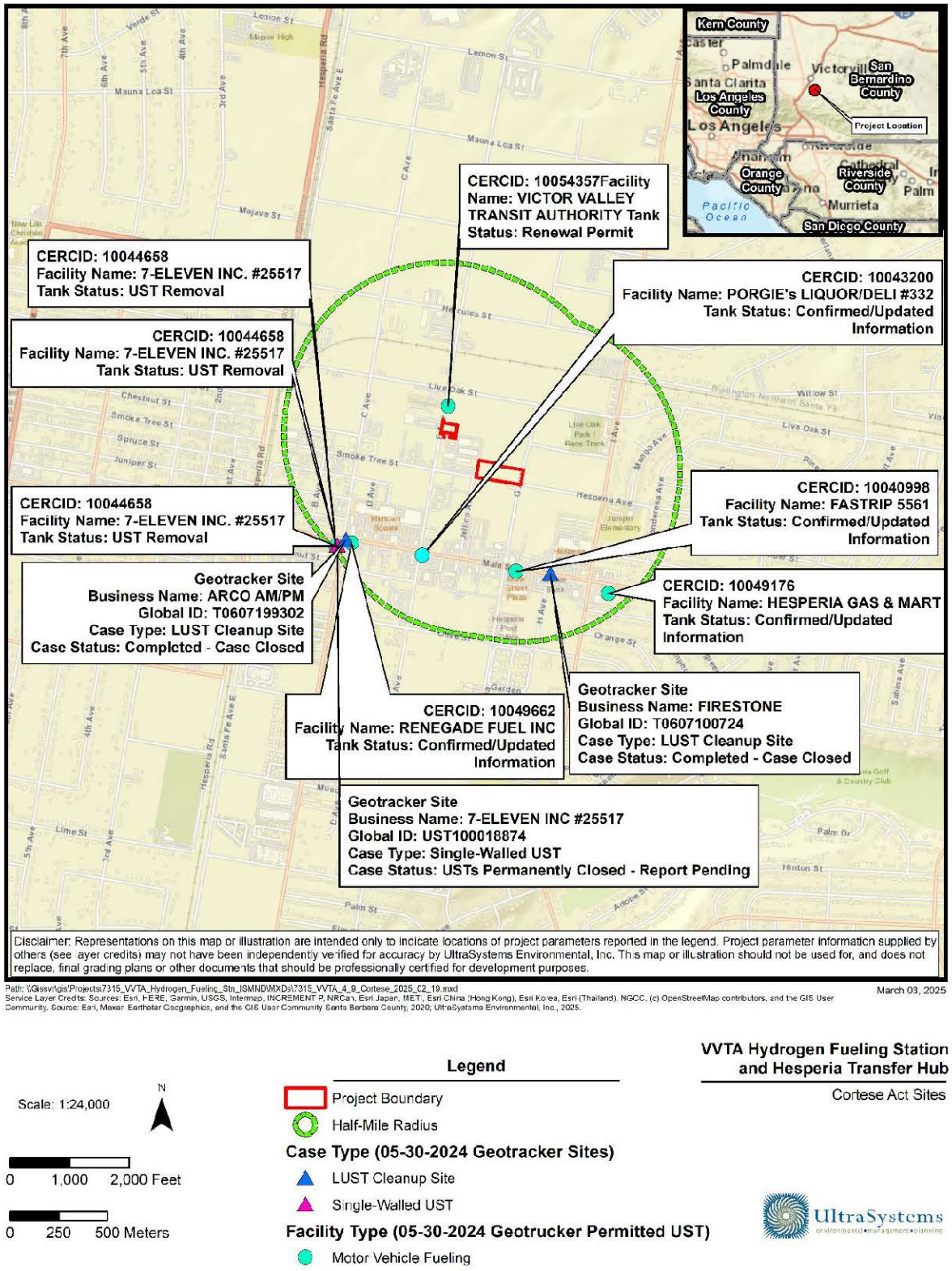
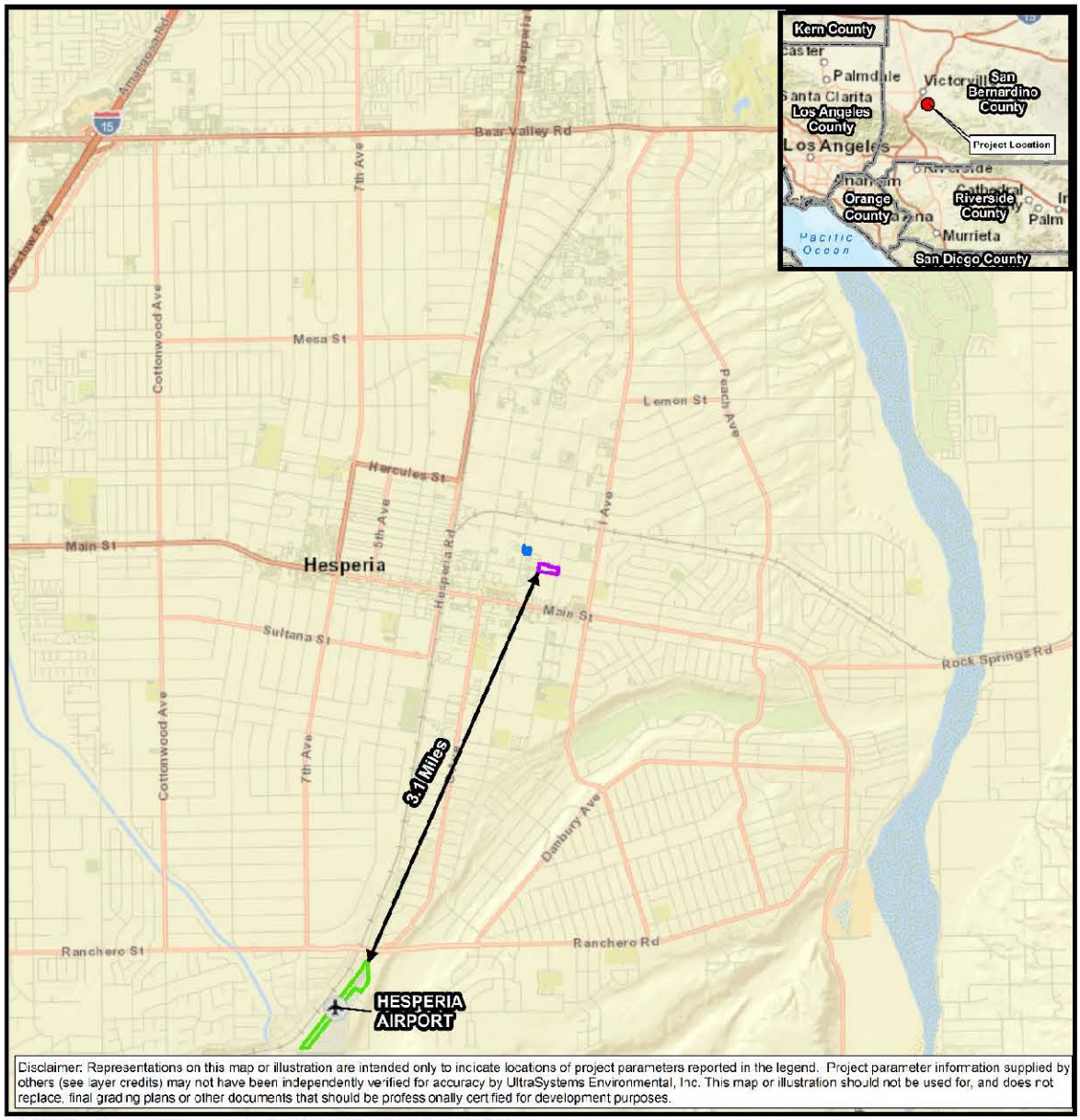


Figure 4.9-2
AIRPORTS MAP



4.10 Hydrology and Water Quality

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			**X**	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			**X**	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:			**X**	
i) result in substantial erosion or siltation on or offsite;			**X**	
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;			**X**	
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			**X**	
iv) impede or redirect flood flows?				**X**
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				**X**
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			**X**	

a) Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less than Significant Impact

The California State Water Resources Control Board requires its nine Regional Water Quality Control Boards (RWQCBs) to develop water quality control plans (Basin Plans) designed to preserve and enhance water quality and protect the beneficial uses of all Regional waters. Specifically, Basin Plans

designate beneficial uses for surface waters and groundwater, set narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the State antidegradation policy, and describe implementation programs to protect all waters in the Regions (RWQCB 1995). In addition, Basin Plans incorporate by reference all applicable State and Regional Board plans and policies, and other pertinent water quality policies and regulations. The proposed project is under the jurisdiction of the Santa Ana (Region 8) RWQCB.

As shown in **Figure 10.4-1,** *USGS Surface Waters and Watersheds*, the project site is located within the USGS Mojave River Subbasin, which spans about 4,600 square miles and much of the central Mojave Desert within San Bernardino County. The Mojave River, the primary stream in the Subbasin, extends 110 miles from the San Bernardino Mountains north and east across the Mojave Desert. The project is located within the Antelope Valley-Mojave River subwatershed, part of the larger Mojave River Subbasin. The major streams within the Antelope Valley-Mojave River subwatershed are the Mojave River in the east end of the subwatershed; and several unnamed desert washes (USEPA 2025).

Development of the projects has the potential to result in two types of water quality impacts: (1) short-term impacts due to construction-related discharges; and (2) long-term impacts from operation. Temporary soil disturbance would occur during project construction, due to earth-moving activities such as excavation and trenching for foundations and utilities, soil compaction and moving, cut and fill activities, and grading. Disturbed soils are susceptible to high rates of erosion from wind and rain, resulting in sediment transport via stormwater runoff from the project area. Erosion and sedimentation affect water quality of receiving waters through interference with photosynthesis, oxygen exchange, and respiration, growth, and reproduction of aquatic species. Runoff from construction sites may include sediments and contaminants such as oils, fuels, paints, and solvents. Additionally, other pollutants such as nutrients, trace metals, and hydrocarbons can attach to sediment and be carried by stormwater into an open channel which discharges to the Mojave River.

Spills and mishandling of construction materials and waste may also potentially leave the project site and negatively impact water quality. The use of construction equipment and machinery may potentially result in contamination from petroleum products, hydraulic fluids, and heavy metals. Contamination from building preparation materials such as paints and solvents, and landscaping materials such as fertilizers, pesticides, and herbicides may also potentially degrade water quality during project construction. Trash and demolition debris may also be carried into storm drains and discharged into receiving waters.

Hydrogen Fueling Station

Source Control BMPs

Trash storage areas are present within the existing VVTA maintenance facility.

Transfer Hub

Existing site drainage is via surface flow into the neighboring property and then into G Avenue; then into an open channel that is tributary to the Mojave River (Calland, 2024a, p. 1). The Mojave River is listed on the Clean Water Act § 303(d) List of Water Quality Limited Segments for fluoride, sodium, and sulfates (Calland, 2024b, p. 3-4).

Figure 4.10-1
USGS SURFACE WATERS AND WATERSHEDS

Construction Pollutants Control

The project proponent is required by the California State Water Resources Control Board (SWRCB) to obtain coverage under a General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2022-0057-DWQ, as authorized by § 402 CWA, NPDES for projects which will disturb one or more acres of soil during construction). The Construction General Permit requires potential dischargers of pollutants to prepare a site-specific Stormwater Pollution Prevention Plan (SWPPP), which establishes enforceable limits on discharges, requires effluent monitoring, designates reporting requirements, and requires construction BMPs to reduce or eliminate point and non-point source discharges of pollutants. Construction BMPs are grouped in six categories: erosion control (prevents soil particles from being detached from soil surface), sediment control (prevents soil particles from being transported offsite by water and being deposited elsewhere), wind erosion control, tracking control (prevents soil from being tracked offsite by vehicles), non-stormwater management controls (prohibits discharges other than stormwater, such as those from cleaning, maintenance, and fueling of vehicles and equipment), and waste management and controls (good housekeeping practices).

Additionally, BMPs must be maintained, inspected before and after each precipitation event, and repaired or replaced as necessary. Because the project is required by the SWRCB to comply with all applicable conditions of Construction General Permit Order 2022-0057-DWQ, potential violations of water quality standards or waste discharge requirements during project construction would be less than significant.

Operational Pollutant Controls

The City of Hesperia is a co-permittee on the Phase 2 Small Municipal Separate Storm Sewer System Permit (Phase2MS4Permit) issued by the state Water Resources Control Board in 2013 (Order No.2013-0001-DWQ). The Phase II MS4 Permit regulates the discharge of pollutants through stormwater and urban runoff conveyance systems, including flood control facilities. These conveyance systems are commonly referred to as municipal separate storm water systems (MS4s), or storm drains.

Pursuant to the MS4 Permit, Principal Permittees (i.e., the San Bernardino County Flood Control District) and Co Permittees (the City of Hesperia is a Co Permittee) must regulate discharges of pollutants in urban runoff from man-made sources into storm water conveyance systems within their jurisdiction.

New development and redevelopment can significantly increase pollutant loads in stormwater and urban runoff, because increased population density results in proportionately higher levels of vehicle emissions, vehicle maintenance wastes, municipal sewage wastes, household hazardous wastes, fertilizers, pet waste, trash, and other pollutants (RWQCB, 2010). The Phase II MS4 Permit requires new development and significant redevelopment projects to incorporate post construction low impact development BMPs into project design to comply with the local Water Quality Management Plan (WQMP) to reduce or eliminate the quantity, and improve the quality, of stormwater being discharged from the project site. BMPs prescribed in the project WQMP are grouped in several categories, as described below.

Structural Source Control BMPs are included in the project design to reduce the potential for pollutants to enter runoff. The following structural source control BMPs are included in the project WQMP:

- Storm drain system signage.
- Design and construct trash and waste storage areas to reduce stormwater contamination.
- Use efficient irrigation systems & landscape design, water conservation, and smart controllers.
- Finish grade of landscaped areas at a minimum of 1-2 inches below top of curb, sidewalk, or pavement (Calland 2024b, p. 4-4).

Nonstructural Source Control BMPs are used during project operation to reduce the potential for pollutants resulting from activities onsite to enter runoff. The following nonstructural source control BMPs are included in the project WQMP:

- Education of Property Owners, Tenants and Occupants on Stormwater BMPs.
- Activity Restrictions such as: no car washing; no auto repairs including oil changing; no sweeping of landscaping waste into catch basins; and no use of detergents or other chemical additives when washing concrete sidewalks or building exteriors.
- Landscape Management BMPs: Landscaping will be designed to group plants per their water needs and irrigation systems will be installed with smart controllers.
- Local Water Quality Ordinances: The Permittees, under the Water Quality Ordinance, may issue permits to ensure clean stormwater discharges from fuel dispensers and other areas of concern to public properties (Calland 2024b, p. 4-3).

Low-Impact Development (LID) BMPs: Low-impact development is "a stormwater management and land development strategy that combines a hydrologically functional site design with pollution prevention measures to compensate for land development impacts on hydrology and water quality. LID techniques mimic the site pre-development site hydrology by using site design techniques that store, infiltrate, evapotranspire, bio-filter or detain runoff close to its source" (San Bernardino County, 2016). The project WQMP includes the following LID BMPs:

- Minimize impervious areas: landscaping is proposed along the project site perimeter.
- Maximize natural infiltration capacity: landscaping is proposed around the building and driveway area to promote infiltration onsite.
- Preserve existing drainage patterns and time of concentration: The proposed drainage pattern is consistent with the existing pattern and the time of concentration would likely be the same.
- Protect existing vegetation and sensitive areas: The project will disturb only the 3.06-acre project site, not the entire parcel.
- Re-vegetate disturbed areas: see above regarding proposed landscaping.
- Minimize unnecessary compaction in stormwater retention/infiltration basin/trench areas: the bottom of the infiltration basin would not be compacted.

- Stake off areas that will be used for landscaping to minimize compaction during construction: The driveway and building sites will be staked out to help determine the landscape area (Calland 2024b, p. 4-6).

Infiltration BMP: The project includes an infiltration basin near the southeast corner of the project site with infiltration area of 6,667 square feet and capacity of 10,000 cubic feet. The infiltration basin is designed to hold runoff from the site from a six-hour, two-year storm (Calland, 2024b, p. 4-17)

With implementation of construction and operational BMPs, potential impacts to water quality would be less than significant and mitigation is not required.

b) Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less than Significant Impact

The project site is in the Upper Mojave River Groundwater Basin ("Basin"), which underlies approximately 645 square miles of the Mojave Desert in San Bernardino County (DWR, 2004). The Hesperia Water District (HWD) provides water to the project site; HWD water supplies consist of groundwater from the Upper Mohave River Valley Groundwater Basin ("basin"); recycled water; and imported water from northern California used to recharge the basin (Hesperia Water District, 2021, p. 3-1). HWD forecasts that it will have sufficient water supplies to meet demands over the 2025-2045 period in normal, single-dry-year, and multiple-dry-year conditions (HWD, 2021, pp. 5-2 and 5-3). HWD water supplies and water supply reliability relative to proposed project water demands are discussed in **Section 4.19**, *Utilities and Service Systems*.

Hydrogen Fueling Station and Transfer Hub

Project development would not substantially deplete groundwater supplies or result in a substantial net deficit in the aquifer volume or lowering of the local groundwater table. The project would have a less than significant impact in this regard and mitigation is not required.

c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. Result in substantial erosion or siltation on or offsite;

Less Than Significant Impact

Hydrogen Fueling Station

The project site is nearly flat, with a northeast slope of about 1.5 percent. Existing drainage of the equipment enclosure site is via surface flow to the northeast. Existing drainage of the dispenser sites is via storm drains discharging to an underground infiltration system in the northeast corner of the existing maintenance facility (Huitt-Zollars, 2010).

Construction

Construction erosion control measures are referenced above in **Section 4.10.a.** Impacts would be less than significant after implementation of erosion control, sediment control, and wind erosion control, and tracking control measures to be specified in the project SWPPP.

Operation

Development of the fueling station would change the drainage pattern within the proposed equipment enclosure area through construction of a proposed 18-foot-high concrete block wall. The project includes installation of a storm drain inlet within the proposed enclosure and a short storm drain discharging to an existing storm drain next to the north side of the existing gasoline dispensers in the existing maintenance facility (Strandberg, 2025b).

Transfer Hub

The project site is relatively flat, with elevations ranging from approximately 3,146 to 3,135 feet above mean sea level (amsl) [Verdantas, 2025, p. 6]. Existing site drainage is via surface flow into the neighboring property and then into G Avenue; then into an open channel that is tributary to the Mojave River (Calland, 2024a, p. 1).

Construction

The construction analysis presented above also applies to the transfer hub site.

Operation

Proposed drainage onsite is via surface flow to the infiltration basin in the southeast part of the site; the infiltration basin would outlet onto vacant land east of the site. At project completion the entire site would consist of the building, hardscape, and landscaped areas, reducing the potential for erosion. The infiltration basin would control the rate of discharge of runoff offsite. Implementation of source control, LID, and infiltration BMPs as described above in Section 4.10.a would further reduce potential erosion. Impacts would be less than significant.

ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less than Significant Impact

The two project sites are outside of 100-year and 500-year flood hazard zones (FEMA, 2025).

Hydrogen Fueling Station

Development of the HFS would change the drainage pattern within the equipment enclosure area as described above in Section 4.10.c.i.

Transfer Hub

Implementation of the source control, LID, and infiltration BMPs—described in Section 4.10.a, would minimize the potential for project development to cause flooding on- or off-site and would prevent the project from causing exceedances of storm drainage systems.

i.v. Impede or redirect flood flows?

No Impact

Hydrogen Fueling Station and Transfer Hub

The project site is outside of 100-year and 500-year flood hazard areas (that is, flood hazard zone X; FEMA, 2025). The project site is located outside the nearest floodplain and the proposed project would not impede or redirect flood flows. No impact would occur, and mitigation is not required.

d) In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

No Impact

Hydrogen Fueling Station and Transfer Hub

The project site is outside of 100-year and 500-year flood hazard zones.

Seiche

A seiche is a surface wave created when an inland water body is shaken, usually by an earthquake. The project sites are outside of dam inundation areas mapped by the California Department of Water Resources and the US Army Corps of Engineers (DWR, 2025; USACE, 2025).

Tsunami

A tsunami is a series of ocean waves caused by a sudden displacement of the ocean floor, most often due to earthquakes. The project sites are located inland within the San Gabriel and San Bernardino Mountains and are shielded away from the Pacific Ocean. Therefore, they are not at risk of inundation by tsunami. No impact would occur, and mitigation is not required.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than Significant Impact

The project sites are in the jurisdiction of the Lahontan Regional Water Quality Control Board (LRWQCB); the Basin Plan for the LRWQCB was last amended in 2021. The project would comply with the Basin Plan through adherence with the Phase 2 MS4 Permit, as described above in **Section 4.10.a.**

No groundwater sustainability plan (GSP) has been completed for the Mojave River Groundwater Basin (MRGWB), and the MRGWB is prioritized as very low priority for a GSP (DWR, 2025b). The

Mojave Water Agency manages both pumping of groundwater from, and intentional recharge to, the MRGWB pursuant to a court judgment. Project water use would not conflict with Mojave Water Agency management of the MRGWB, as substantiated above in **Section 4.10.b**. Impacts would be less than significant and no mitigation is required.

4.11 Land Use and Planning

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Physically divide an established community?				X
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?				X

a) Would the project physically divide an established community?

No Impact

The project site is located within an urbanized area and is surrounded entirely by existing industrial land uses. The Victor Valley Transit Authority (VVTA) bus maintenance facility directly abuts the southern boundary of the site. The property is currently vacant, fenced, and unused, and does not serve as a corridor or connection for pedestrian or vehicular access between surrounding neighborhoods or communities.

Because the site is isolated from residential or community-serving uses and is not part of any established community or circulation network, the proposed development would not physically divide an established community. Therefore, the project would have no impact.

b) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact

The project site is located within the General Industrial (GI) Zone, which falls under the Industrial District of the Eastern Sector of the Main Street Freeway Corridor Specific Plan (MSFC-SP). As detailed in Title 16 of the Hesperia Municipal Code, commonly known as the Development Code, this area is designated to support a broad spectrum of industrial uses, including manufacturing, fabrication, warehousing, and outdoor storage. The General Industrial Zone is expressly intended to facilitate large-scale industrial operations with supporting infrastructure (City of Hesperia, 2023a. p. 200-201).

The proposed project, led by VVTA, involves construction of two transit-supporting facilities:

- A Hydrogen Fueling Station to serve VVTA buses and public passenger vehicles with the capacity to serve up to 60 buses and up to 20 cars daily.
- A Hesperia Transfer Hub featuring 10 bus bays, passenger amenities, and transit support facilities.

Both components of the project are consistent with the purpose and permitted uses of the General Industrial Zone, and further the objectives of the MSFC-SP by enhancing regional transportation infrastructure and supporting sustainable transit operations.

The proposed project does not include any land use changes, variances, or General Plan amendments, although a Conditional Use Permit (CUP) will be needed for its approval. It also aligns with policies aimed at reducing regional vehicle miles traveled (VMT), supporting alternative fuels, and improving public transit, which are all relevant to environmental quality goals.

Based on the nature of the proposed project as infill development, and the land use consistency analysis provided in **Table 4.11-1**, the project does not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. With implementation of the conditions that would be included as part of the Conditional Use Permit by the city, impacts under this criterion would be less than significant.

Table 4.11-1
CONSISTENCY ANALYSIS

Goals and Policies	Consistency Analysis
Land Use and Zoning	
General Industrial (GI): This zone is intended to provide the full range of manufacturing, fabrication, assembly, warehousing and distribution use types associated with heavy industrial land uses, including outside manufacturing, warehousing and storage.	This project involves the development of a hydrogen fueling station and a transit transfer hub by the VVTA. Under the Main Street Freeway Corridor Specific Plan (MSFC-SP), both fueling stations and bus terminals are identified as conditionally permitted uses within the General Industrial (GI) zone. The project is allowable upon issuance of a Conditional Use Permit (CUP) from the City of Hesperia. With approval of the CUP, the project will be fully consistent with the land use designation and zoning standards applicable to the site. Additionally, the project aligns with broader land use goals and policies established in the City of Hesperia General Plan, including support for regional transit infrastructure, industrial development, and sustainable mobility systems.

Sources: Main Street Freeway Corridor Specific Plan, 2023.

4.12 Mineral Resources

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			**X**	
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?			**X**	

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

and

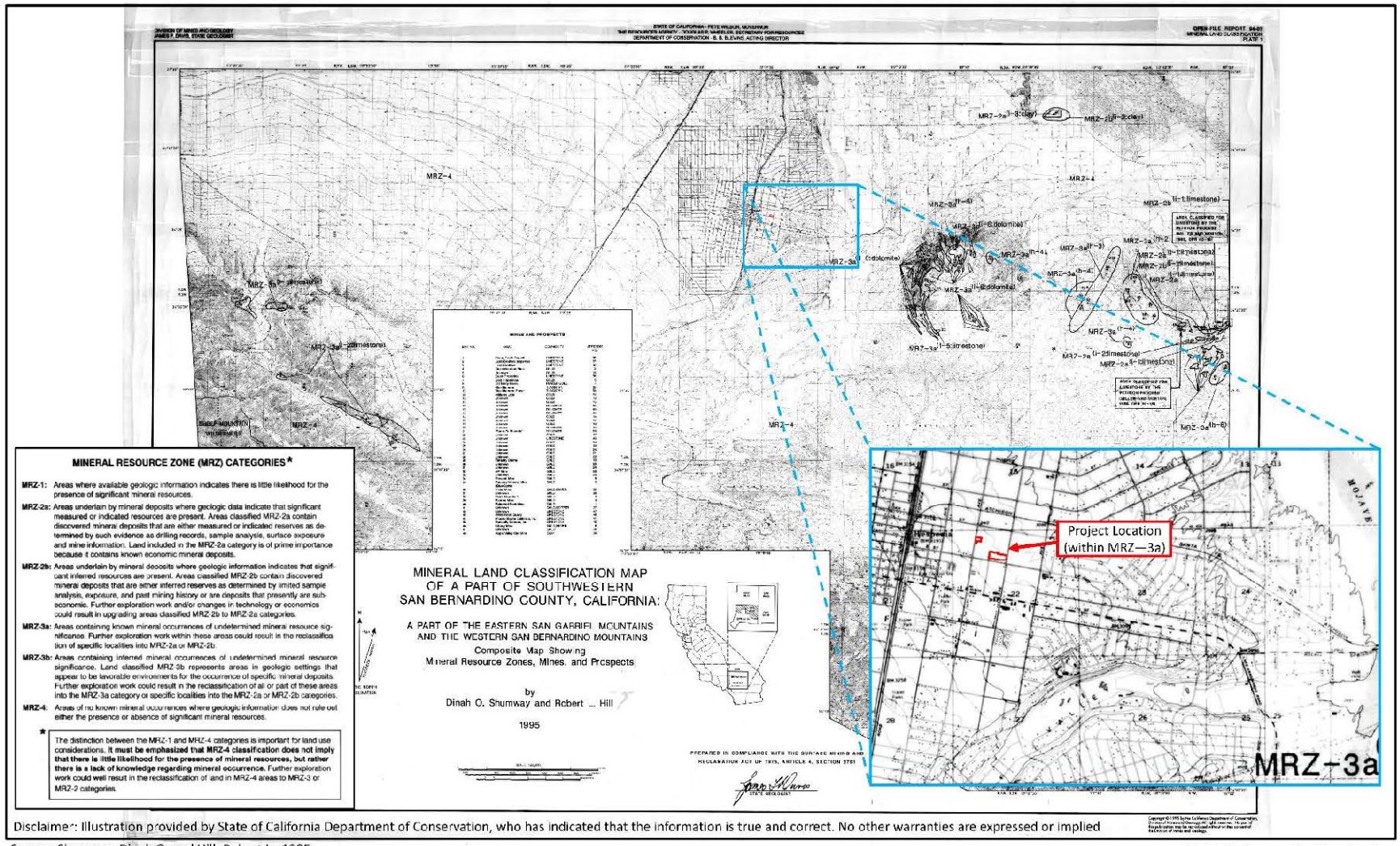
b) Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

Less than Significant Impact

The project site is a designated Mineral Resource Zone (MRZ-3a) by the California Department of Conservation (DOC), meaning that geologic data indicate that this area may contain significant aggregate deposits (DOC, 1993); see **Figure 4.12-1**. According to the proposed Hesperia General Plan Conservation and Open Space Element, the City of Hesperia currently has not identified any known mineral resources that would be of value to the region and the residents of the state (City of Hesperia, 2019a). Additionally, the project site is large enough to be used for a mining operation.

The nearest mine to the project site mapped by the Division of Mines Reclamation (DMR) is the White Knob and White Ridge Mine at Crystal Creek Road and Gateway Road in the County of San Bernardino approximately 20.2 miles to the southeast (DOC, 2025a). The nearest oil or gas well to the project site is a plugged well approximately 12.15 miles southwest of the project site (DOC, 2025b; see **Figure 4.12-2**). Therefore, project development would not cause a loss of availability of known mineral resources valuable to the region and would have less than significant impact.

Figure 4.12-1
DESIGNATED MINERAL RESOURCE ZONE



Disclaimer: Illustration provided by State of California Department of Conservation, who has indicated that the information is true and correct. No other warranties are expressed or implied

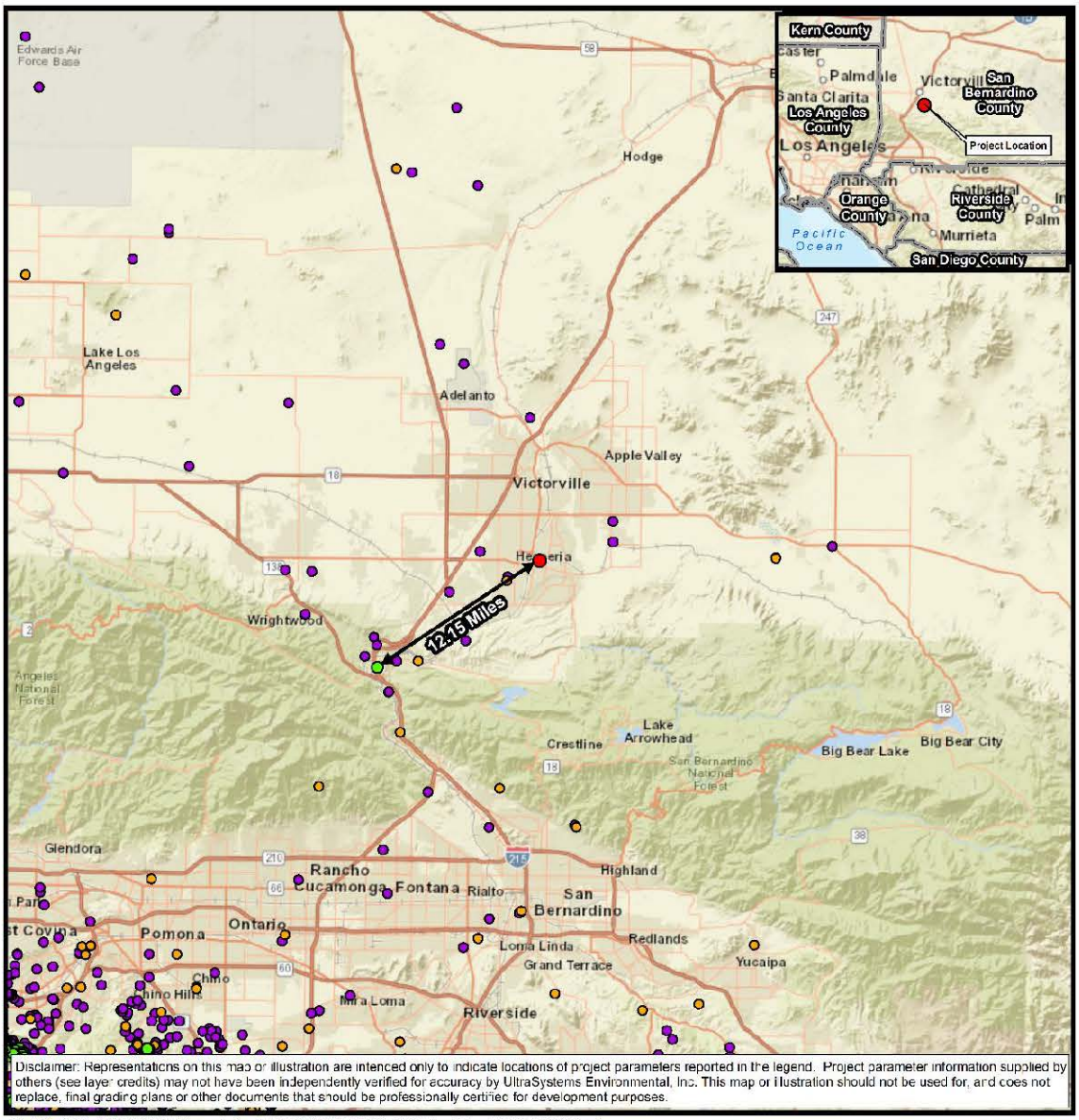
Source: Shumway, Dinah O. and Hill, Robert L., 1995.

UltraSystems
environmental • management • planning

VVTA Hydrogen Fueling Station and Hesperia Transfer Hub

Designated Mineral Resource Zones

Figure 4.12-2
OIL, GAS AND GEOTHERMAL WELLS



4.13 Noise

Would the project result in:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Generation of excessive ground borne vibration or ground borne noise levels?			X	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X

4.13.1 Characteristics of Sound

Sound is a pressure wave transmitted through the air. It is described in terms of loudness or amplitude (measured in decibels), frequency or pitch (measured in hertz or cycles per second), and duration (measured in seconds or minutes). The decibel (dB) scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Because the human ear is not equally sensitive to all frequencies, a special frequency-dependent rating scale is used to relate noise to human sensitivity. The A-weighted decibel scale (dBA) provides this compensation by discriminating against upper and lower frequencies in a manner approximating the sensitivity of the human ear. The scale is based on a reference pressure level of 20 micro pascals (zero dBA). The scale ranges from zero (for the average least perceptible sound) to about 130 (for the average human pain level).

4.13.2 Noise Measurement Scales

Several rating scales have been developed to analyze adverse effects of community noise on people. Since environmental noise fluctuates over time, these scales consider that the effect of noise on people depends largely upon the total acoustical energy content of the noise, as well as the time of day when the noise occurs. Those that are applicable to this analysis are as follows:

- L_{eq}, the equivalent noise level, is an average of sound level over a defined time period (such as 1 minute, 15 minutes, 1 hour or 24 hours). Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure.
- L_{90} is a noise level that is exceeded 90 percent of the time at a given location; it is often used as a measure of "background" noise.

- L_{max} is the root mean square (RMS) maximum noise level during the measurement interval. This measurement is calculated by taking the RMS of all peak noise levels within the sampling interval. L_{max} is distinct from the peak noise level, which only includes the single highest measurement within a measurement interval.
- CNEL, the Community Noise Equivalent Level, is a 24-hour average L_{eq} with a 4.77-dBA "penalty" added to noise during the hours of 7:00 p.m. to 10:00 p.m., and a 10-dBA penalty added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime (Hendriks, 2013). The logarithmic effect of these additions is that a 60-dBA 24-hour L_{eq} would result in a calculation of 66.7 dBA CNEL.
- L_{dn}, the day-night average noise, is a 24-hour average L_{eq} with an additional 10-dBA "penalty" added to noise that occurs between 10:00 p.m. and 7:00 a.m. The L_{dn} metric yields values within 1 dBA of the CNEL metric. As a matter of practice, L_{dn} and CNEL values are considered to be equivalent and are treated as such in this assessment.

4.13.3 Existing Noise

The project site is located in the City of Hesperia, adjacent to Victor Valley Transit Authority's (VVTA) existing operations and maintenance facility at 17150 Smoke Tree Street The surrounding area includes industrial, commercial, and residential land uses. The major sources of ambient noise include traffic from nearby roadways such as E Avenue and Smoke Tree Street, operations at the existing transit facility, and general community activity. Sensitive receptors in the vicinity include residential neighborhoods to the northwest and southwest of the project site, as well as commercial establishments nearby.

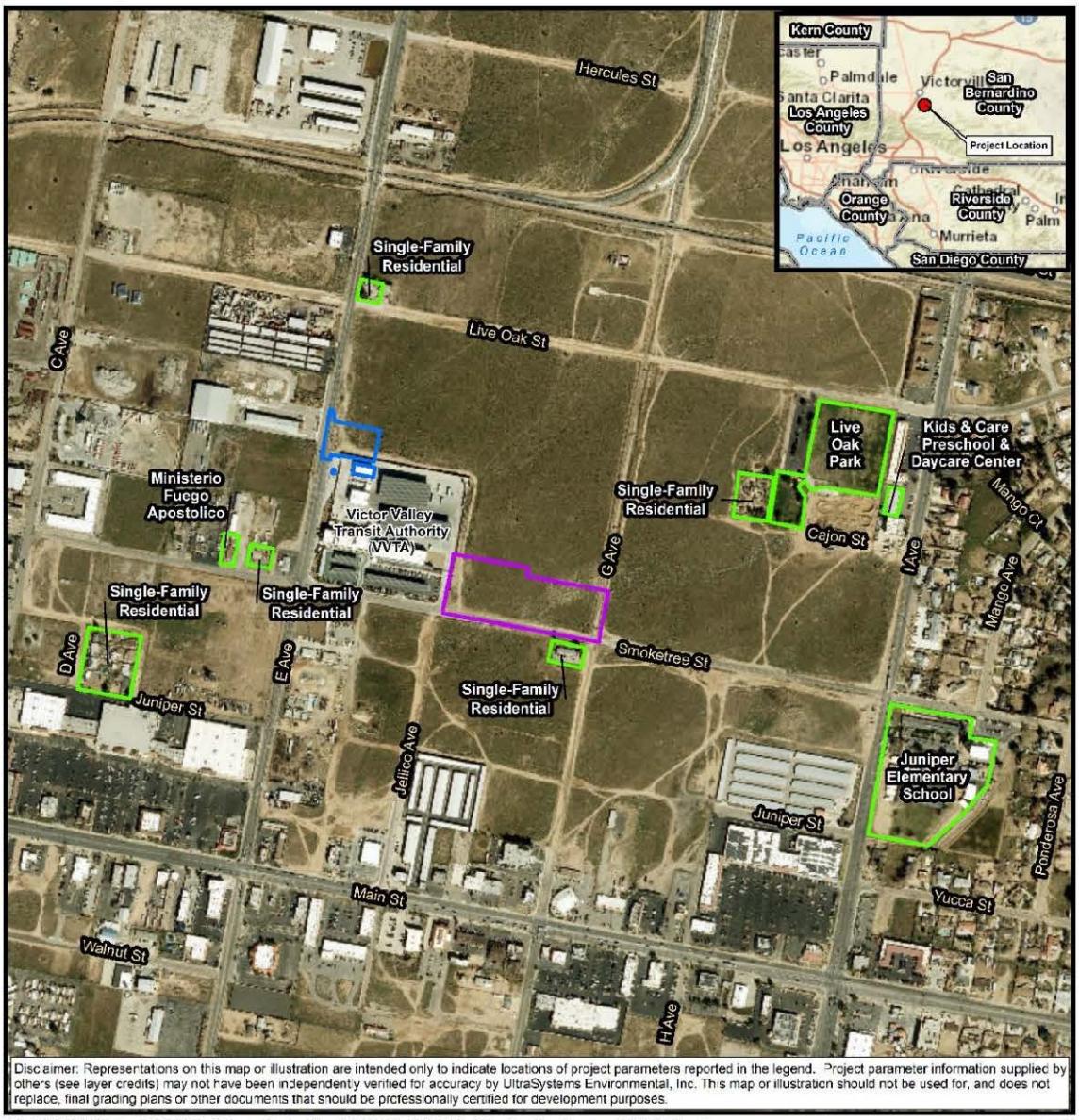
The City of Hesperia's General Plan lists sensitive receivers as land uses associated with indoor and/or outdoor activities that may be subject to stress and/or significant interference from noise, such as residential dwellings, hotels, motels, dormitories, hospitals, educational facilities, and libraries (City of Hesperia, 2010, p. NS-4). Sensitive receivers within the City include single- and multi-family residential, schools, parks, libraries, hospitals, and churches (City of Hesperia, 2010, p. NS-4). Additionally, the City's Municipal Code has applicable noise standards in regard to construction noise, interior noise, and exterior noise (City of Hesperia Municipal Code, 2002). The closest sensitive receivers to the project site include the single-family house directly south of the transfer hub project site, the single-family house north of the hydrogen fuel station project site, the single-family house west of both project sites, and Juniper Elementary School, which is east of the transfer hub project site (Google Earth Pro, 2025). Sensitive receivers are shown in **Figure 4.13-1**. **Table 4.13-1** summarizes information about them.

Table 4.13-1
SENSITIVE RECEIVERS IN PROJECT AREA

Description	Location	Distance From Site Boundary (feet)	Nearest Ambient Sampling Point[a]
Single-family Residence (South)	17223 Smoke Tree Street	69	1
Single-family Residence (West)	16907 Spruce Street	1,305	2
Single-family Residence (North)	17110 Live Oak Street	647	3
Juniper Elementary School	9400 I Avenue	1,514	4

[a]See **Figure 4.13-2** for locations of ambient noise sampling points.

Figure 4.13-1
SENSITIVE RECEPTORS NEAR THE PROJECT SITE



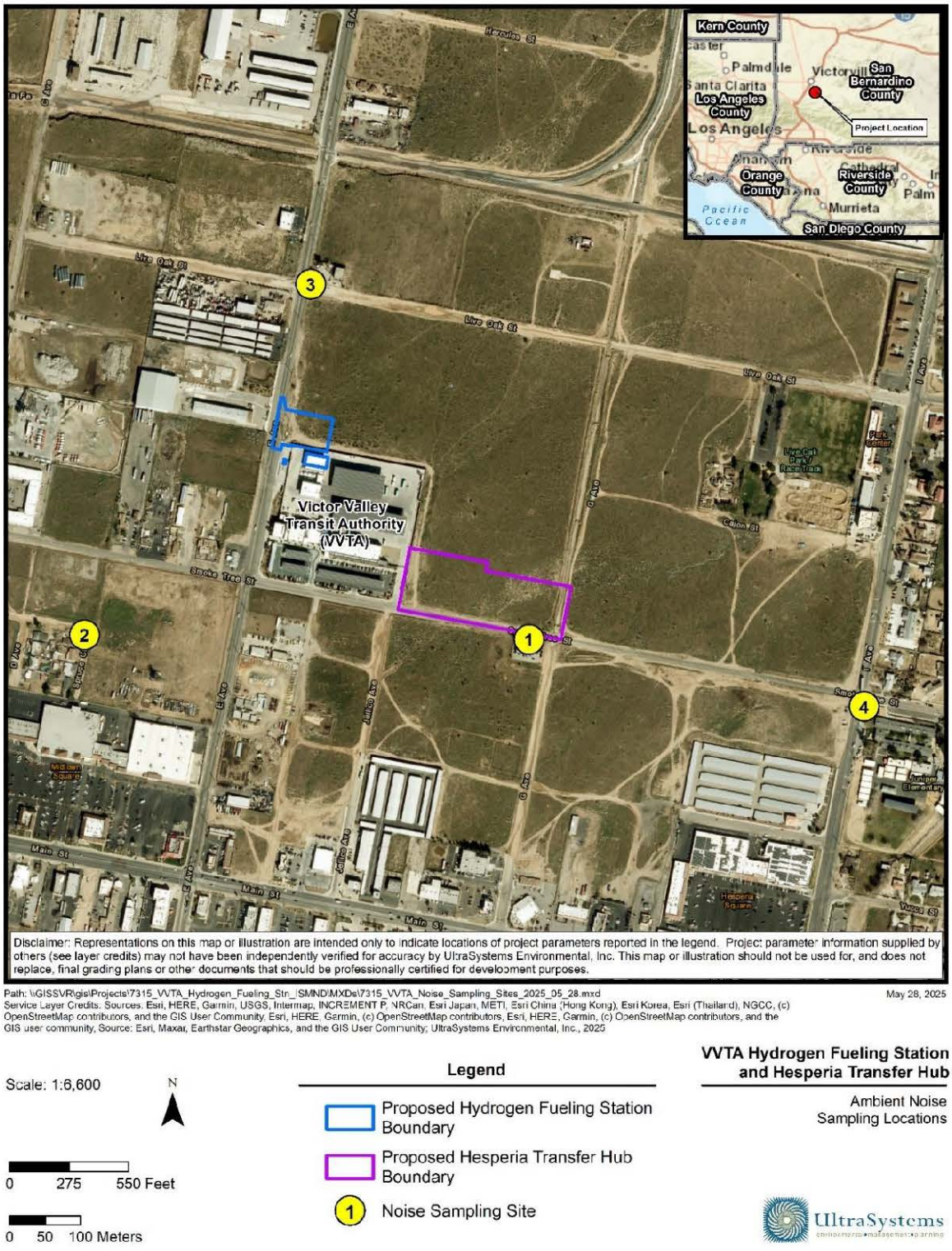
On May 22, 2025, UltraSystems obtained 15-minute ambient noise level samples at four locations in the general area of the project. Sampling locations are shown in **Figure 4.13-2** (see **Appendix J**). Measurements were made between 1:28 p.m. and 3:15 p.m. As shown in **Table 4.13-2,** average short-term ambient noise levels (L_{eq}) ranged from 52.7 to 69.8 dBA L_{eq}. The 69.8-dBA noise level was along I Avenue, in front of Juniper Elementary School. All monitored noise levels were within the range considered typical for the nearby land uses.

Table 4.13-2
AMBIENT NOISE MEASUREMENT RESULTS

Point	Data Set	Sampling Time	Address	Sound Level (dBA)			Notes
				L_{eq}	L_{max}	L_{90}	
1	S002	1354-1411	17223 Smoke Tree Street	66.0	83.2	45.3	In front of a single-family residence south of the project site
2	S004	1500-1515	16907 Spruce Street	52.7	68.9	48.6	In front of a single-family residence west of the project site
3	S001	1328-1343	17110 Live Oak Street	67.0	81.4	48.5	In front of a single-family residence north of the project site
4	S003	1430-1435	9400 I Avenue	69.8	87.8	60.4	In front of Juniper Elementary School, east of the project site

Source: Ambient measurements performed by UltraSystems on May 22, 2025.

Figure 4.13-2
AMBIENT NOISE MEASUREMENT LOCATIONS



4.13.4 Regulatory Setting

State of California

The California Department of Health Services (DHS) Office of Noise Control has studied the correlation of noise levels with effects on various land uses. (The Office of Noise Control no longer exists.) The most current guidelines prepared by the state noise officer are contained in the "General Plan Guidelines" issued by the Governor's Office of Planning and Research in 2003 and reissued in 2017 (Governor's Office of Planning and Research, 2017). These guidelines establish four categories for judging the severity of noise intrusion on specified land uses:

- **Normally Acceptable**: Is generally acceptable, with no mitigation necessary.
- **Conditionally Acceptable**: May require some mitigation, as established through a noise study.
- **Normally Unacceptable**: Requires substantial mitigation.
- **Clearly Unacceptable**: Probably cannot be mitigated to a less-than-significant level.

The types of land uses addressed by the state standards, and the acceptable noise categories for each, are presented in **Table 4.13-3**. There is some overlap between categories, which indicates that some judgment is required in determining the applicability of the numbers in a given situation.

Table 4.13-3
CALIFORNIA LAND USE COMPATIBILITY FOR COMMUNITY NOISE SOURCES

Land Use Category	Noise Exposure (dBA, CNEL)						
	55	60	65	70	75	80	
Residential – Low-Density Single-Family, Duplex, Mobile Homes							
Residential – Multiple Family							
Transient Lodging – Motel, Hotels							
Schools, Libraries, Churches, Hospitals, Nursing Homes							
Auditoriums, Concert Halls, Amphitheaters							
Sports Arena, Outdoor Spectator Sports							
Playgrounds, Neighborhood Parks							

Land Use Category	Noise Exposure (dBA, CNEL)						
Golf Courses, Riding Stables, Water Recreation, Cemeteries							
Office Buildings, Business Commercial and Professional							
Industrial, Manufacturing, Utilities, Agriculture							

	Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.
	Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply system or air conditioning will normally suffice.
	Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
	Clearly Unacceptable: New construction or development should generally not be undertaken.

Source: Governor's Office of Planning and Research, 2017.

City of Hesperia General Plan Noise Element

The Noise Element of the City of Hesperia General Plan (City of Hesperia, 2010) identifies sources of noise in the city and provides goals and policies that ensure that noise from various sources would not create an unacceptable noise environment. Key objectives include:

Goal NS-1: To achieve and maintain an environment which is free from excessive or harmful noise through identification, control and abatement.

> Implementation Policy NS-1.1: Incorporate noise reduction features during site planning and into land use planning decisions to mitigate anticipated noise impacts on affected residential and noise-sensitive land uses.
>
> Implementation Policy NS-1.5: Require the design and construction of commercial, industrial, office, and mixed-use structures to be developed with noise attenuation methods to minimize excessive noise upon noise-sensitive land uses.
>
> Implementation Policy NS-1.10: Limit the hours of construction activity in, and around, residential areas in order to reduce the intrusion of noise in the early morning and late evening hours and on weekends and holidays**.**
>
> Implementation Policy NS-1.12: Implement nighttime and daytime on-site noise level limits to address noise generated by commercial and industrial uses where it affects abutting residential and other noise-sensitive land uses.

Implementation Policy NS-1.13: Ensure adequate noise control measures at construction sites by requiring that construction equipment be fitted with manufacturer recommended mufflers and ensuring physical separation of machinery maintenance and staging areas from adjacent residential uses.

Goal NS-2: To achieve and maintain an environment which is free from excessive vibration.

Implementation Policy NS-2.1: Control exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels as set forth in Table NS-1 and Municipal Code Section 16.20.130.

City of Hesperia Municipal Code

The City of Hesperia's regulations with respect to noise are included in Municipal Code § 16.20.125 (Noise).[9]

City of Hesperia Municipal Code § 16.20.125

B. Noise Standards

1. The following table describes the noise standard for emanations from any source, as it affects adjacent properties:

Table 4.13-4
CITY OF HESPERIA NOISE STANDARDS

Affected Land Use (Receiving Noise)	Maximum Noise Level	Time Period
A-1, A-2, R-1, R-3 and RR Zone Districts	55 dB(A)	10:00 p.m. - 7:00 a.m.
A-1, A-2, R-1, R-3 and RR Zone Districts	60 dB(A)*	7:00 a.m. - 10:00 p.m.
C-1, C-2, C-3, C-4, C-R, AP, and P-I Zone Districts	65 dB(A)*	Anytime
I-1 and I-2 Zone Districts	70 dB(A)*	Anytime
*Due to wind noise, the maximum permissible noise level may be adjusted so that it is no greater than five dB(A) above the ambient noise level.		

2. No person shall operate or cause to be operated any source of sound at any location or allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, which causes the noise level, when measured on any other property, either incorporated or unincorporated, to exceed:

9https://library.municode.com/ca/hesperia/codes/code_of_ordinances?nodeId=TIT16DECO_CH16.20GERE_ARTVGEPEST_16.20.125NO&showChanges=true

a. The noise standard for that receiving land use (as specified in subsection (B)(1) of this section) for a cumulative period of more than thirty (30) minutes in any hour; or

b. The noise standard plus five dB(A) for a cumulative period of more than fifteen (15) minutes in any hour; or

c. The noise standard plus ten dB(A) for a cumulative period of more than five minutes in any hour; or

d. The noise standard plus fifteen (15) dB(A) for a cumulative period of more than one minute in any hour; or

e. The noise standard plus twenty (20) dB(A) for any period of time.

C. If the measured ambient level exceeds any of the first four noise limit categories above, the allowable noise exposure standard shall be increased to reflect the ambient noise level. If the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under this category shall be increased to reflect the maximum ambient noise level.

D. If the alleged offense consists entirely of impact noise or simple tone noise, each of the noise levels in subsection (B)(1) of this section shall be reduced by five dB(A).

E. Exempt Noises. The following sources of noise are exempt:

1. Motor vehicles not under the control of the industrial use;

2. Emergency equipment, vehicles and devices;

3. Temporary construction, repair, or demolition activities between seven a.m. and seven p.m. except Sundays and federal holidays.

4.13.5 Significance Thresholds

Two criteria were used for analyzing noise impacts. First, noise levels generated by the proposed project must comply with all applicable relevant federal, state, and local standards and regulations. Noise impacts on the surrounding community are limited by local noise ordinances, which are implemented through investigations in response to nuisance complaints. It is assumed that all existing regulations for the construction and operation of the proposed project will be enforced. In addition, the proposed project should not produce noise levels that are incompatible with adjacent noise-sensitive land uses.

The second measure of impact used in this analysis is a significant increase in noise levels above existing ambient noise levels as a result of the introduction of a new noise source. An increase in noise level due to a new noise source has a potential to adversely impact people. The proposed project would have a significant noise impact if it would:

- Expose persons to or generate noise levels in excess of standards prescribed by the City of Hesperia Municipal Code; or

- Include construction activities within the hours prohibited by the Municipal Code, without a permit; or
- Generate construction noise exceeding 80 dBA L_{eq} (FTA, 2018, p. 179).
- Contribute, with other local construction projects, to a significant cumulative noise impact; or
- Increase operational exposures at sensitive receivers (mainly because of an increase in traffic flow) by 5 dBA CNEL or more.

4.13.6 Impact Analysis

a) Would the project result in generation of substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less than Significant Impact

Noise impacts associated with fueling stations and transfer hubs include short-term and long-term impacts. Construction activities, especially heavy equipment operation, would create noise effects on and adjacent to the construction site. Long-term noise impacts include project-generated onsite operational noise sources. Offsite noise would be attributable to project-induced traffic, which would cause an incremental increase in noise levels within and near the project vicinity.

Construction

Noise impacts from construction activities are a function of the noise generated by the operation of construction equipment and onroad delivery and worker commuter vehicles, the location of equipment, and the timing and duration of the noise-generating activities. For the purpose of this analysis, it was estimated that the proposed project would be built in six phases, each of which would have the phases listed in **Table 4.13-5**. Construction is anticipated to run approximately one year, from early October 2025 to late October 2026.

The types and numbers of pieces of equipment to be deployed during each construction phase were determined as part of the air quality and greenhouse gas emissions analyses for this project.[10] For each equipment type, **Table 4.13-5** shows an average noise emission level (in dB at 50 feet, unless otherwise specified) and a "usage factor," which is an estimated fraction of operating time that the equipment would be producing noise at the stated level.

10 See Section 4.3 and Section 4.8.

Table 4.13-5
CONSTRUCTION EQUIPMENT CHARACTERISTICS

Phase	Equipment Type	Horse-power	No. of Pieces	Usage Factor	dBA @ 50 Feet
1 – Demolition (Transfer Hub)	Rubber-Tired Dozers	367	1	0.40	79
	Concrete/Industrial Saws	33	1	0.20	90
	Tractor/Loader/Backhoe	84	3	0.37	85
1 – Demolition (Hydrogen Fueling Station)	Concrete/Industrial Saws	33	1	0.20	90
	Rubber-Tired Dozers	367	1	0.40	79
	Tractor/Loader/Backhoe	84	2	0.37	85
2 – Site Preparation (Transfer Hub)	Graders	148	1	0.41	85
	Tractor/Loader/Backhoe	84	1	0.37	85
	Scrapers	423	2	0.14	88
2 – Site Preparation (Hydrogen Fueling Station)	Graders	148	1	0.41	85
	Tractor/Loader/Backhoe	84	1	0.37	85
3 - Grading (Transfer Hub)	Graders	148	1	0.41	85
	Rubber-Tired Dozers	367	1	0.40	79
	Tractor/Loader/Backhoe	84	2	0.37	85
	Excavators	36	3	0.40	80
	Off-Highway Trucks	402	3	0.40	75
	Sweepers/Scrubbers	36	2	0.10	82
3 - Grading (Hydrogen Fueling Station)	Graders	148	1	0.41	85
	Rubber-Tired Dozers	367	1	0.40	79
	Tractor/Loader/Backhoe	84	2	0.37	85
4 - Building Construction (Transfer Hub)	Cranes	367	1	0.08	83
	Forklift	82	2	0.30	67
	Generator Sets	14	1	0.50	73
	Welders	46	3	0.45	74
	Tractor/Loader/Backhoe	84	2	0.37	85
	Aerial Lift	46	4	0.20	75
	Air Compressors	37	6	0.48	81
	Bore/Drill Rig	83	1	0.20	84
	Sweepers/Scrubbers[11]	36	2	0.10	82
4 - Building Construction (Hydrogen Fueling Station)	Cranes	367	1	0.08	83
	Forklift	82	2	0.30	67
	Tractor/Loader/Backhoe	84	2	0.37	85
	Cement and Mortar Mixers	10	1	0.40	85

11 Calculated from FHWA vacuum street sweeper noise data. U.S. Department of Transportation, Federal Highway Administration. Construction Noise Handbook, Table 9.1, 2018. https://www.nrc.gov/docs/ML1805/ML18059A141.pdf. Accessed on May 28, 2025.

Phase	Equipment Type	Horse-power	No. of Pieces	Usage Factor	dBA @ 50 Feet
5 – Paving (Transfer Hub)	Paving Equipment	89	1	0.50	85
	Rollers	36	2	0.10	74
	Pavers	81	1	0.50	77
	Off-Highway Trucks	376	3	0.40	75
	Concrete/Industrial Saws	33	1	0.20	90
	Pressure Washers[12]	14	2	0.30	61
	Sweepers/Scrubbers	36	2	0.10	82
	Plate Compactors	8	1	0.10	81
5 – Paving (Hydrogen Fueling Station)	Cement and Mortar Mixers	10	1	0.40	85
	Tractor/Loader/Backhoe	84	2	0.37	85
	Rollers	36	2	0.10	74
	Pavers	81	1	0.50	77
6 – Architectural Coating (Transfer Hub)	Air Compressors	37	6	0.48	81
6 – Architectural Coating (Hydrogen Fueling Station)	Air Compressors	37	6	0.48	81

Using calculation methods published by the Federal Transit Administration,[13] UltraSystems estimated the average hourly exposures at the nearest sensitive receiver for each construction phase. The receivers evaluated included the single-family house directly south of the transfer hub project site, the single-family house north of the hydrogen fuel station project site, the single-family house west of both project sites, and Juniper Elementary School east of the transfer hub project site (see **Figure 4.13-1**). The distances used for the calculation were measured from the receivers to the approximate center of activity of each construction phase, since that would be the average location of construction equipment most of the time. **Table 4.13-6** shows the relationships between the construction schedule and construction phases that will be occurring concurrently during different time periods.

12 Calculated from high-pressure pump operating noise data in Noise Red Flag Tables, Ontario Ministry of the Environment, Conservation and Parks, 1997. https://www.ontario.ca/page/noise-red-flag-tables#section-14. Accessed May 28, 2025

13 Transit Noise and Vibration Impact Assessment Manual. Federal Transit Administration, Office of Planning and Environment, Washington, DC, FTA Report No. 0123. September 2018. Internet: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf.

Table 4.13-6
NOISE ANALYTICAL FRAMEWORK

Phase	Dates	Construction Subphase(s)
1	First Half of October 2025	Demolition (Transfer Hub)
		Demolition (Hydrogen Fuel Station)
		Site Preparation (Hydrogen Fuel Station)
2	Fourth Week of October 2025	Demolition (Transfer Hub)
		Grading (Hydrogen Fuel Station)
		Building Construction (Hydrogen Fuel Station)
3	Fifth Week of October 2025	Demolition (Transfer Hub)
		Site Preparation (Transfer Hub)
		Building Construction (Hydrogen Fuel Station)
4	November 2025	Site Preparation (Transfer Hub)
		Grading (Transfer Hub)
		Building Construction (Hydrogen Fuel Station)
5	November 2025 – March 2026	Building Construction (Transfer Hub)
		Building Construction (Hydrogen Fuel Station)
6	March 2026	Paving (Hydrogen Fuel Station)
		Architectural Coating (Hydrogen Fuel Station)
7	April 2026 – September 2026	Building Construction (Transfer Hub)
8	September 2026	Paving (Transfer Hub)
9	October 2026	Architectural Coating (Transfer Hub)

Table 4.13-7 summarizes the estimated construction-related short-term noise exposures at the nearest sensitive receiver for each construction phase. In no cases were there intervening buildings between a noise source and a receiver. Residential noise exposures due to construction activities would be about 58.9 to 74.3 dBA L_{eq}. The highest value is due mainly to the fact that there is a sensitive receiver immediately across the street from the project site and some of the construction activities would be near the project boundary.

Table 4.13-7
ESTIMATED ONE-HOUR CONSTRUCTION NOISE EXPOSURES AT NEAREST SENSITIVE RECEIVERS

Receiver No.	Location	Period of Maximum Exposure	Activity for Maximum Exposure	Exposure (dBA L_{eq})
1	17223 Smoke Tree Street	October 2025 November 2025	Demolition - (Transfer Hub) Site Preparation – (Transfer Hub) Building Construction - (Hydrogen Fuel Station) Site Preparation – (Transfer Hub) Grading - (Transfer Hub) Building Construction - (Hydrogen Fuel Station)	74.3
2	16907 Spruce Street	October 2025	Demolition - (Transfer Hub) Demolition – (Hydrogen Fuel Station) Site Preparation – (Hydrogen Fuel Station)	63.0
3	17110 Live Oak Street	October 2025	Demolition - (Transfer Hub) Demolition – (Hydrogen Fuel Station) Site Preparation – (Hydrogen Fuel Station)	67.9
4	9400 I Avenue	October 2025	Demolition - (Transfer Hub) Demolition – (Hydrogen Fuel Station) Site Preparation – (Hydrogen Fuel Station)	58.9

Noise exposure from construction of the proposed project would not exceed the FTA's 80 dBA L_{eq} threshold. Therefore, impacts would be less than significant.

Operational Noise

Onsite

Onsite noise sources from the proposed fueling station and transfer hub projects would include operation of mechanical equipment such as the compressors at the hydrogen fueling station, air conditioners, and building maintenance equipment; and motor vehicles accessing, driving on, and exiting the parking lot. Noise levels associated with operation of the project are expected to be comparable to those of nearby residential areas. Therefore, noise from onsite sources would be less than significant.

A compressor at a hydrogen fueling station puts out 95 dBA at a distance of 1 meter (Ardagh et al., 2014). A containment wall that is two inches thick can reduce the noise by 20 dBA. Project implementation will include a CMU wall around the perimeter of the hydrogen fueling station before project completion. Taking this design feature into consideration exposures at residential receptors

to noise generated from the compressors at the hydrogen fueling station was calculated to range from about 16 to 28 dBA L_{eq}. As a result, impacts would be less than significant.

Mobile Sources

The VMT analysis prepared for the transfer hub project (Pringle, 2025a) estimated that the development will generate 292 trips per day. However, on December 2018, OPR issued the Technical Advisory on Evaluating Transportation Impacts in CEQA. Section F of that report discusses the effects of transportation projects on vehicle travel. The guidance "Transit and Active Transportation Projects," states the following:

> "Transit and active transportation projects generally reduce VMT and therefore are presumed to cause a less-than-significant impact on transportation. This presumption may apply to all passenger rail projects, bus and bus rapid transit projects, and bicycle and pedestrian infrastructure projects. Streamlining transit and active transportation projects aligns with each of the three statutory goals contained in SB 743 by reducing GHG emissions, increasing multimodal transportation networks, and facilitating mixed use development."

It can therefore be concluded that the proposed project would not cause a substantial increase in VMT and would not have a significant VMT impact under CEQA (Pringle, 2025a). The proposed hydrogen fueling station project is unique and a published trip rate for a hydrogen fuel station is not available. It is estimated that there are about 12,000 hydrogen fuel cars in California which makes up 1.1% of alternative fuel cars in the state. Therefore, it is unlikely that public use of the hydrogen fueling station will attract many trips (Pringle, 2025b). VVTA would use the hydrogen fueling station to fill the bus fleet primarily between 7:00 PM and 3:00 AM daily, which is outside of normal peak hour traffic and would therefore not be considered as contributing trips (Pringle, 2025b). Therefore, roadway noise associated with project operation would not expose land use to noise levels that are considered incompatible with or in excess of adopted standards, and impacts would be less than significant.

b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant Impact

Vibration is sound radiated through the ground. Vibration can result from a source (e.g., subway operations, vehicles, machinery equipment, etc.) causing the adjacent ground to move, thereby creating vibration waves that propagate through the soil to the foundations of nearby buildings. This effect is referred to as groundborne vibration. The peak particle velocity (PPV) or the RMS velocity is usually used to describe vibration levels. PPV is defined as the maximum instantaneous peak of the vibration level, while RMS is defined as the square root of the average of the squared amplitude of the level. PPV is typically used for evaluating potential building damage, while RMS velocity in dB is typically more suitable for evaluating human response.

The background vibration velocity level in residential areas is usually around 50 vibration decibels (VdB). The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for most people. Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment,

steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration from traffic is rarely perceptible. The range of interest is from approximately 50 VdB to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings.

Construction Vibration

Construction activities for the project have the potential to generate low levels of groundborne vibration. The operation of construction equipment generates vibrations that propagate though the ground and diminish in intensity with distance from the source. Vibration impacts can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage of buildings at the highest levels. The construction activities associated with the project could have an adverse impact on both sensitive structures (i.e., building damage) and populations (i.e., annoyance).

The question is whether the equipment that will be deployed will have significant vibration impacts. The FTA (2018) has published standard vibration levels for construction equipment operations, at a distance of 25 feet. The construction related vibration levels for the nearest sensitive receivers for major construction phases are shown in **Table 4.13-8**. These calculations were based on the distances from the construction activity to the closest sensitive receivers.

Table 4.13-8
VIBRATION LEVELS OF TYPICAL CONSTRUCTION EQUIPMENT

Equipment	PPV at 25 feet (in/sec)	Vibration Decibels at 25 feet (VdB)	PPV at 322 feet (in/sec)	Vibration Decibels at 322 feet (VdB)	PPV at 73 feet (in/sec)	Vibration Decibels at 73 feet (VdB)
Loaded trucks	0.076	86			0.023	72
Jackhammer	0.035	79	0.0021	46		
Small bulldozer	0.003	58	0.00018	25		
Large bulldozer	0.089	87	0.00054	54		

Sources: Data at 25 feet from (FTA, 2006, p. 12-12); calculations by UltraSystems.

As shown in **Table 4.13-9**, the PPV of construction equipment at the nearest sensitive receiver (73 feet) is at 0.023 inch per second, which is less than the FTA damage threshold of 0.12 inch per second PPV for fragile historic buildings. The maximum VdB are 72 VdB, which are below the FTA threshold for human annoyance of 80 VdB. Unmitigated vibration impacts would therefore be less than significant.

Operational Vibration

The project involves the operation of commercial uses and would not involve the use of stationary equipment that would result in high vibration levels, which are more typical for large manufacturing and industrial projects. Groundborne vibrations at the project site and immediate vicinity currently result from heavy-duty vehicular travel (e.g., refuse trucks and transit buses) on the nearby local roadways, and the project would not result in a substantive increase of these heavy-duty vehicles on

the public roadways. Therefore, vibration impacts associated with operation of the project would be less than significant.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact

The closest active public use airport to the project site is Hesperia Airport, located approximately 3.1 miles south-southwest of the project site. The project site is situated well outside the airport's influence area boundary and noise contours, as designated by the San Bernardino County Airport Land Use Commission (Vidal, 1991). Therefore, the proposed project will not expose residents or workers to excessive airport-related noise levels, and no impact is anticipated in this regard.

4.14 Population and Housing

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through the extension of roads or other infrastructure)?				**X**
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				**X**

a) Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through the extension of roads or other infrastructure)?

No Impact

The population of the City of Hesperia is forecast to increase by 40,713, or 40.7 percent, between 2024 and 2050 and employment is estimated to nearly triple, as shown below in **Table 4.14-1**. The 2024 estimates are from the California Department of Finance (CDF), while the 2050 forecast is from the Southern California Association of Governments (SCAG) (CDF, 2024; SCAG, 2024). The 2022 employment estimate, the latest available, is from the US Census Bureau (USCB, 2025a). Note that, for the five incorporated cities in VVTA's local service area combined, population is forecast to increase by nearly 46 percent from 2024 to 2050, and employment is estimated to increase by about 133 percent, as shown in **Table 4.14-2** (CDF, 2024; SCAG, 2024; USCB, 2025a).[14, 15]

Table 4.14-1
DEMOGRAPHIC FORECAST, CITY OF HESPERIA

	2024 [employment: 2022]	2050	Difference, 2050 - 2024	Percent Difference, 2050 - 2024
City of Hesperia				
Population	100,087	140,800[1]	40,713	40.7%
Households	30,079	51,200	21,121	70.2%
Employment	16,870	47,500	30,630	181.6%

14 The five incorporated cities in VVTA's local service area are Hesperia, Victorville, Adelanto, Apple Valley, and Barstow.

15 Incorporated cities are used because population forecasts are not available for the unincorporated parts of VVTA's local service area.

	2024 [employment: 2022]	2050	Difference, 2050 - 2024	Percent Difference, 2050 - 2024

Notes: 1: 2050 populations are estimated based on the forecast numbers of households in 2050 and the estimated countywide average household size in 2050; the method is recommended by SCAG for estimating future-year city populations.
Sources: SCAG, 2024; CDF, 2024; US Census Bureau, 2025.

Table 4.14-2
DEMOGRAPHIC ESTIMATES, INCORPORATED CITIES IN VVTA'S LOCAL SERVICE AREA

	2024[1] [employment: 2022]	2050	Difference, 2050 - 2024	Percent Difference, 2050 - 2024
Population				
Hesperia	100,087	140,800	40,713	40.7%
Victorville	138,202	180,675	42,473	30.7%
Adelanto	36,131	82,775	46,644	129.1%
Apple Valley	74,322	106,425	32,103	43.2%
Barstow	24,669	33,275	8,606	34.9%
Total	**373,411**	**543,950[1]**	**170,539**	**45.7%**
Employment				
Hesperia	16,870	47,500	30,630	181.6%
Victorville	32,947	62,100	29,153	88.5%
Adelanto	6,058	24,300	18,242	301.1%
Apple Valley	15,426	30,100	14,674	95.1%
Barstow	6,513	17,000	10,487	161.0%
Total	**77,814**	**181,000**	**103,186**	**133%**

Notes: 1: 2050 populations are estimated based on the forecast numbers of households in 2050 and the estimated countywide average household size in 2050.
Sources: SCAG, 2024; CDF, 2024; US Census Bureau, 2025.

Construction and operation of the proposed Hydrogen Fueling Station and transfer hub would not induce substantial unplanned population growth in the city of Hesperia. A few employees would work at the transfer hub. Construction of the two facilities would generate a small number of short-term construction jobs. The unemployment rate in San Bernardino County in March 2025 was estimated at 5.0 percent (EDD, 2025). Project employment is expected to be absorbed from the regional labor force and is not anticipated to attract workers to move into the region. The proposed

project by nature as a transit development project, is growth accommodating and would not remove existing constraints to growth, add housing or employment, or result in population growth in the area directly or indirectly; therefore, no impacts would occur.

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact

The proposed project site is currently vacant and no residences are on-site. The proposed project would not displace people or necessitate the construction of replacement housing elsewhere; therefore, no impact would occur.

4.15 Public Services

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?			**X**	
b) Police protection?			**X**	
c) Schools?			**X**	
d) Parks?			**X**	
e) Other public facilities?			**X**	

a) Fire protection?

Less than Significant Impact

The San Bernardino County Fire Protection District (SBCFPD) provides fire protection and emergency medical services to the City of Hesperia. SBCFPD operates three fire stations. The nearest station to the project site is Station 302 at 17288 Olive Street, approximately 0.5 mile to the south. Station 302 is staffed by seven firefighters daily, and is equipped with one paramedic engine, two paramedic ambulances, and one brush engine. Station 302 is also the headquarters of the SBCFCD North Desert Division, housing the North Desert Assistant Chief and administrative staff (SBCFPD, 2025). Both project sites are located in an existing SBCFPD service area.

Hydrogen Fueling Station (HFS)

Most of VVTA's existing bus fleet is powered by compressed natural gas. Refueling vehicles with hydrogen is not considered substantially more hazardous than refueling with natural gas. The following information about hazards of hydrogen compared to those of natural gas was obtained from *Safety issues of hydrogen in vehicles* (Barbir, 2012).[16]

- Hydrogen tends to escape through a leak more quickly than natural gas and disperses much more quickly than natural gas.
- Natural gas has over three times the energy density per volume of hydrogen.
- Hydrogen can burn at four percent by volume in air ("lower flammability limit"); this limit is four times higher than that of gasoline and slightly lower than that of natural gas. Hydrogen

16 Mr. Barbir is professor of Electrical Engineering, Mechanical Engineering and Naval Architecture at the University of Split, Croatia.

has a very low ignition energy (0.02 millijoule[17]); at the lower flammability limit hydrogen ignition energy is comparable with that of natural gas.

- Hydrogen flames are nearly invisible, which may be dangerous, because people near a hydrogen flame may not even know there is a fire. Hydrogen flames emit relatively low heat; thus, nearby materials and people will be much less likely to ignite and/or hurt by radiant heat transfer.

- The lowest concentration of hydrogen in air at which hydrogen will explode is 13 percent to 18 percent; thus, in the open atmosphere hydrogen will burn before it explodes, and a hydrogen explosion in the open atmosphere is highly unlikely. The corresponding concentration for natural gas is only half that of hydrogen. In the event of an explosion hydrogen has only 4.5 percent of the explosive energy of the same volume filled with gasoline vapor.

Project operation would include implementation of a Hydrogen Safety Action Plan (HSAP) prepared by Trillium, which would operate the proposed HFS. The HSAP includes training for first responders and for employees. Hydrogen fires cannot be extinguished with water and must rather be extinguished by cutting off the hydrogen supply (Trillium, 2023). Impacts of HFS operation on demands for SBCFPD facilities would be less than significant.

Transfer Hub

Operation of the transfer hub involves some increase in bus operations compared to existing conditions. However, that increase is already planned and would not be due to the proposed project (VVTA, 2024). Operation of the hub is expected to involve some beneficial impact regarding safety, due to the improved facilities compared to the existing transfer location, and the provision of an indoor cooling center, a shade structure, and water at the hub. Thus, operation of the transfer hub is not expected to cause any increase in demand for fire protection, and no adverse impact would occur.

b) Police protection?

Less than Significant Impact

The San Bernardino County Sheriff's Department provides police protection to the city of Hesperia under contract with the City. Sheriff's staff assigned to the city include 58 sworn officers and 20 civilian staff. The police station is at 15840 Smoketree Street about 1.5 miles west of the project site (City of Hesperia 2025b). The project sites are located in an existing San Bernardino County Sheriff service area, and VVTA currently has a contract with the San Bernardino County Sheriff's Department for police protection services.

Hydrogen Fueling Station

HFS operation is not expected to generate increased demand for police protection. The hydrogen storage and compression equipment will be secured in an enclosure surrounded by a concrete block wall. The dispensers for VVTA buses and for public use will be on the existing VVTA operations and maintenance facility. The fueling station would have the capability to serve up to 60 buses daily and

17 1 millijoule is equivalent to 0.000239 calories. Ignition energy of a fuel/air mixture is measured in millijoules per cubic meter.

serve up to 20 cars daily. That level of use within the operations and maintenance facility is not expected to require any increase in police protection or significantly alter the existing contract between VVTA and the San Bernardino County Sheriff's Department.

Transfer Hub

Operation of the transfer hub is expected to have a beneficial impact on public safety as described above in **Section 4.15.a**. The transfer hub would also be staffed with a security guard and would contain a security office. No adverse impact would occur.

c) Schools?

Less than Significant Impact

The project site is within the Hesperia Unified School District. Demand for schools is generated by the number of households within school's attendance boundaries. The project does not include housing and would not increase population; project development would not generate demand for new or expanded schools. Therefore, no impact would occur.

d) Parks?

The Hesperia Recreation and Parks District (HRPD) provides park facilities and recreation services to the city of Hesperia and some surrounding areas of unincorporated San Bernardino County. HRPD operates 15 facilities (HRPD, 2025). Demands for parks are generated by the population in the parks' service areas. The project does not include housing; project development would not increase population and thus would not increase demand for parks. Therefore, no impact would occur.

e) Other Public Facilities?

Less Than Significant Impact

Library

The San Bernardino County Library System Hesperia Branch Library is at 9650 7th Avenue (SBCL, 2025). Demands for libraries are generated by the population in the facilities' service areas. The project does not include housing; project development would not increase population and thus would not increase demand for libraries. Therefore, no impact would occur.

4.16 Recreation

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact

Recreational services in the city of Hesperia are provided by the Hesperia Recreation and Park District (HRPD), which maintains 15 recreation facilities, parks, streetlights, and landscape maintenance districts. The City's Park acreage standard is 114 acres of public park land per 1,000 residents. The city currently has approximately 73 square miles total in parks and land for public use, enough to meet this performance standard.

Demand for parks is generated by the population in the parks' service areas, and the project will not increase population. Project development will not generate demand for parks, thus there would be no impact. .

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact

The project does not include recreation facilities and will not require construction or expansion of such facilities. The project would not generate demand for parkland because there would be no increase in population and therefore, there would be no impact on the environment.

4.17 Transportation

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			**X**	
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?				**X**
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			**X**	
d) Result in inadequate emergency access?			**X**	

The following analysis is based on the Technical Analysis and Vehicle Miles Traveled (VMT) Screening for the Victor Valley Transit Authority (VVTA) Hesperia Transfer Hub Project (Pringle, 2025a) and the Technical Analysis and Vehicle Miles Traveled (VMT) Screening for the Hydrogen Fueling Station Project (Pringle, 2025b), both prepared by Weston Pringle, P.E., Transportation Engineering Consultant, dated March 18, 2025, for the proposed project (refer to **Appendices J1** and **J2**).

a) Would the project conflict with a program plan, ordinance or policy addressing circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less than Significant Impact

The VVTA Operations Plan, the City of Hesperia General Plan Circulation Element, and the Southern California Association of Governments' Connect SoCal 2024 Plan each address key components of the regional circulation system, including transit services, roadway networks, and bicycle and pedestrian facilities.

The proposed hydrogen fueling station and transfer hub are transit-supportive, local-serving facilities that improve regional mobility and facilitate the transition to zero-emission transportation in accordance with the VVTA's fleet conversion goals.

The project does not conflict with any applicable city or regional transportation plans, ordinances or policies. It improves multimodal connectivity and public access to zero-emission transit, supporting the goals of the Connect SoCal 2024 under SB 375.

The hydrogen fueling station, designed to serve both VVTA buses and the public, and the adjacent transfer hub, which consolidates and modernizes existing bus transfer functions, are consistent with the Circulation Element of the City of Hesperia General Plan, the regional transportation goals set forth in Connect SoCal 2024, and the applicable local transit development policies. Therefore, the project would not conflict with any adopted program, plan, ordinance, or policy that addresses the circulation system, including those related to transit services, roadway capacity, bicycle routes, or pedestrian infrastructure. The impacts related to transportation and circulation would be less than significant.

b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b).

No Impact

VMT screening assessments determined that both project components—hydrogen fueling station and transfer hub—generate negligible new trips and do not meet the threshold for further VMT analysis. As local-serving facilities that promote zero-emission transit and improved bus connectivity, they are inherently VMT-reducing (Pringle, 2025a/b).

- Thresholds: Below significance thresholds; no Transportation Impact Study (TIS) is required.
- Required Studies: VMT screening assessments completed.
- Mitigation Strategies: Not required due to inherent VMT-reducing characteristics.

Therefore, there would be no project VMT impact.

c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less than Significant Impact

The proposed project would not substantially increase the hazards due to a design feature or incompatible use. Primary vehicular access to the site, including for buses, employees, and the public, would be provided by a four-lane driveway from Smoke Tree Street along the southern boundary of the project site. This access design is consistent with City of Hesperia standards and does not involve sharp curves, abrupt turns, or other hazardous geometric features.

The site layout includes clearly delineated areas for public parking, consisting of 95 automobile stalls, including accessible and electric vehicle charging spaces, as well as designated motorcycle and bicycle parking areas. Additionally, a separate driveway will provide dedicated access to a passenger drop-off and pick-up area, located in the central south portion of the site, ensuring safe circulation and minimizing potential conflicts between transit operations and private vehicle movements. The internal circulation has been designed to accommodate transit vehicles and passenger vehicles safely and efficiently. Therefore, the project would not result in any hazardous design features or introduce incompatible uses, and the impacts under this threshold would be less than significant.

d) Would the project result in inadequate emergency access?

Less than Significant Impacts

Construction

The proposed project would not result in inadequate emergency access. Although construction activities may require temporary closure of a section or lane of Smoke Tree Street, such work would occur within the public right-of-way and would be subject to the City of Hesperia's encroachment permit requirements. The City's Engineering Department would review all encroachment permit applications to ensure that construction staging and lane closures do not impede emergency vehicle access to the project site or surrounding properties and do not create traffic safety hazards. Compliance with all permit conditions, including provisions to maintain emergency access, is mandatory and enforceable as a condition of approval. Therefore, the project would not impair emergency response or evacuation plans and impacts would be less than significant.

Operation

The proposed project would not result in inadequate emergency access. The project would be required to comply with all applicable City of Hesperia regulations, including provisions of the City's Fire Code and the California Building Standards Code, which collectively ensure adequate emergency access is maintained. Prior to the issuance of building permits, the City will review detailed site plans to verify that the layout of buildings, fencing, access driveways, and other structural features do not impede emergency response capabilities. The proposed site design includes designated fire and access lanes capable of accommodating emergency vehicles such as fire trucks, police units, and ambulances. Additionally, all on-site circulation and sight distance parameters would adhere to applicable design standards. Through the City's development review process and mandatory compliance with applicable codes and standards, the project would ensure sufficient emergency egress and ingress. Accordingly, impacts related to emergency access would be less than significant.

4.18 Tribal Cultural Resources

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources as defined in Public Resources Code § 5020.1(k)?				**X**
b) Cause a substantial adverse change in the significance of a tribal cultural resource that is determined to be a significant resource to a California Native American tribe pursuant to the criteria set forth in subdivision (c) of Public Resource Code § 5024.1(c)?		**X**		

Information from UltraSystems' Phase I Cultural Resources Inventory, dated May 28, 2025 for the proposed project (refer to **Appendix D**) is included in the analysis below.

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources as defined in Public Resources Code § 5020.1(k)?

No Impact

A traditional cultural site within a 0.5-mile buffer of the project boundary is documented in the Native American Heritage Commission's (NAHC) Sacred Lands File (SLF) search. No resources as defined by Public Resources Code § 21074 have been identified (refer to **Attachment C**: "Native American Heritage Commission Records Search and Native American Contacts" in **Appendix D** to this IS/MND). Additionally, the project site has not been recommended for historic designation for prehistoric and tribal cultural resources (TCRs). No specific tribal resources have been identified by local tribes responding to inquiries for the Cultural Resources Inventory.

According to the cultural resource records search at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton, it was determined that no prehistoric cultural resources were previously recorded within the project site boundary or within the 0.5-mile buffer zone.

No prehistoric archaeological resources were observed during the archaeological field survey conducted March 20, 2025 by Rocky Ciarmoli, B.A., RPA as part of the cultural resources investigation (**Section 4.3**, **Appendix D**). The results of the pedestrian assessment indicate that it is unlikely that

prehistoric resources will be adversely affected by construction of the project. (Refer to **Appendix D**).

No tribal cultural resources onsite are listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources as defined in Public Resources Code § 5020.1(k). Therefore, the project would have no impact in this regard.

b) Would the project cause a substantial adverse change in the significance of a tribal cultural resource that is determined to be a significant resource to a California Native American tribe pursuant to the criteria set forth in subdivision (c) of Public Resource Code § 5024.1(c)?

Less than Significant Impact with Mitigation Incorporated

Assembly Bill 52 (AB 52) requires meaningful consultation with California Native American Tribes on potential impacts on TCRs, as defined in Public Resources Code § 21074. TCRs are sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either eligible or listed in the California Register of Historical Resources or local register of historical resources (CNRA, 2007).

As part of the AB 52 process, Native American tribes must submit a written request to the lead agency to be notified of projects within their traditionally and culturally affiliated area. The lead agency must provide written, formal notification to those tribes within 14 days of deciding to undertake a project. The tribe must respond to the lead agency within 30 days of receiving this notification if they want to engage in consultation on the project, and the lead agency must begin the consultation process within 30 days of receiving the tribe's request. Consultation concludes when either (1) the parties agree to mitigation measures to avoid a significant effect on a tribal cultural resource, or (2) a party, acting in good faith and after reasonable effort, concludes mutual agreement cannot be reached.

The Victor Valley Transit Authority (VVTA) (the lead agency) conducted AB 52 outreach with local tribes for the Hydrogen Fueling Station and Transfer Hub project. The VVTA prepared and sent letters through email to the several tribes on their list for AB 52 contact, informing them of the project.

Letters were sent to the following tribes on March 27, 2025:

- San Manuel Band of Mission Indians,
- Chemehuevi Indian Tribe.

Letters were sent to the following tribes on March 31, 2025:

- Morongo Band of Mission Indians,
- Quechan Indian Tribe of the Fort Yuma Reservation,
- San Fernando Band of Mission Indians,
- Serrano Nation of Mission Indians,
- Twenty-Nine Palms Band of Mission Indians.

The email sent to the San Fernando Band of Mission Indians was returned as undeliverable. The letter was then sent through USPS mail.

The letters convey that the recipient has 30 days from receipt of the letter to request AB 52 consultation regarding the project.

Raylene Borrego, Cultural Resources Technician with the San Manuel Band of Mission Indians responded to the AB 52 outreach by email on March 28, 2025. Ms. Borrego indicated that the proposed project area is located within Serrano ancestral territory and is of interest to the Tribe. The tribe also requested the Cultural report, Geotechnical report, and Project plans showing the depth of proposed disturbance. The email also indicated that this information will assist the tribe in ascertaining how the Tribe will assume consulting party status under CEQA and participate, moving forward, in project review and implementation. The Geotechnical report and Project plans were provided on April 17, 2025. Once the Cultural Resources Report is finalized it will be submitted to the VVTA and provided to the San Manuel Band of Mission Indians.

The Quechan Indian Tribe of the Fort Yuma Reservation responded through email on April 1, 2025 indicating that the tribe does not wish to comment on the project.

Nicolas Garza, Cultural Resources Specialist with the Twenty-Nine Palms Band of Mission Indians responded by email on April 30, 2025 (letter dated April 15, 2025). He indicated that the project is within the Chemehevi Traditional Use Area but no known resources are located within the project APE. There is the possibility of surface or buried archaeological materials. The tribe requests that the agency follow specific conditions for all cultural resources. The letter also indicated that the letter was not intended to be considered government to government consultation.

Sarah Bertman of the Morongo Band of Mission Indians responded through email on May 21, 2025 that the project location is located within the ancestral territory and traditional use area of the Cahuilla and Serrano people of the Morongo Band of Mission Indians. The tribe requests tribal monitoring during all ground disturbing activities. The tribe also requested copies of the Project design and Mass Grading Maps , CHRIS records search, Shapefiles of the Projects area of effect (APE), and the Geotechnical Report. Once the Cultural Resources Report is finalized it will be submitted to the VVTA and provided to the San Manuel Band of Mission Indians.

Following mailing of the tribal contact letters and their consultation between the VVTA and the tribes, the results of that consultation shall be placed in an updated IS/MND. THIS TEXT WILL BE UPADTED ONCE THE AB 52 CONSULTATION HAS CONCLUDED BETWEEN VVTA AND THE TRIBES.

Implementation of the proposed project will include grading. Grading activities associated with development of the project would involve new subsurface disturbance and could result in the unanticipated discovery of unknown human remains, including those interred outside of formal cemeteries. In the unlikely event of an unexpected discovery, implementation of mitigation measures **TCR-2** dealing with associated funerary objects and **TCR-3** dealing with human remains are recommended to ensure that impacts related to the accidental discovery of human remains would be less than significant.

Mitigation Measures

MM TCR-1: [To Be Determined.] Mitigation measure TCR 1 is yet to be determined, and if needed will be added following AB 52 consultation.

MM TCR-2: Tribal Cultural Resources and Archaeological Monitoring. The project archaeologist, in consultation with interested tribes, and VVTA, shall develop

an Archaeological Monitoring Plan (AMP) to address the details, timing, and responsibility of archaeological and cultural activities that will occur on the project site. Details in the AMP shall include:

1. Monitoring of project-related ground disturbance (including, but not limited to, brush clearing, grading, trenching, etc.) coordinated with these construction-related activities;
2. The development of a simultaneous monitoring schedule in coordination with the developer and the project archeologist for the designated Native American Tribal Monitors from the two consulting tribes during grading, excavation and ground disturbing activities on the site: including the scheduling, safety requirements, duties, scope of work, and Native American Tribal Monitors' authority to stop and redirect grading activities in coordination with the project archaeologist.;
3. The protocols and stipulations that the developer, VVTA, Tribes, and project archaeologist will follow in the event of inadvertent TCR discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources evaluation.

At least 30 days prior to application for a grading permit and before any brush clearance, grading, excavation, and/or ground disturbing activities on the site, the developer shall retain a tribal cultural monitor(s) to monitor all ground-disturbing activities in an effort to identify any unknown TCRs.

Pursuant to the AMP, a tribal monitor from the consulting tribe(s) shall be present during the initial grading activities. The tribal monitor(s) shall be present during all ground disturbing work, not only if something is found during initial grubbing.

MM TCR-2: Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. If funerary objects are discovered during grading or archeological excavations, they shall be treated in the same manner as bone fragments that remain intact and the construction contractor and/or qualified archeologist shall consult with the Xxxxxx tribe.

MM TCR-3: As specified by California Health and Safety Code Section 7050.5, if human remains are found on the project site during construction or during archaeological work, the San Bernardino County Coroner's office shall be immediately notified and no further excavation or disturbance of the discovery or any nearby area reasonably suspected to overlie adjacent remains shall occur until the Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code 5097.98. The Coroner would determine within two working days of being notified, if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC would make a determination as to the Most Likely Descendent.

Level of Significance After Mitigation

With implementation of **MM TCR-1,** potential project impacts on TCRs would be less than significant. With implementation of Mitigation Measures **MM TCR-2** and **MM TCR-3** above, the proposed project would result in less than significant impacts to human remains and associated funerary objects.

4.19 Utilities and Service Systems

Would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?			**X**	
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			**X**	
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			**X**	
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			**X**	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			**X**	

a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less than Significant Impact

Wastewater Treatment and Conveyance – The Victor Valley Wastewater Reclamation Authority (VVWRA) provides wastewater treatment to much of the City of Hesperia, including the project site (Hesperia Water District, 2021, p. 3-14). VVWRA's treatment plant has 12.5 million gallons per day (mgd) capacity (University of California Riverside, 2025); average wastewater flows through the facility are 10.7 mgd (VVWRA, 2025a). The City of Hesperia also operates a Hesperia Subregional Water Recycling facility with capacity of 1 mgd (VVWRA, 2025b). The City of Hesperia owns, operates, and maintains a sewer system (Hesperia Water District, 2021, p. 3-14).

Hydrogen Fueling Station

The hydrogen fueling station (HFS) does not include restrooms or other facilities that would be connected to sewers. Thus, HFS operation would not generate wastewater and no impact would occur.

Transfer Hub

The proposed transfer hub (HTH) includes restrooms. However, since transit passengers and workers who would use the transfer hub already live and/or work in the project region, which is within VVWRA's service area, project operation would not substantially increase wastewater generation in the region, and impacts would be less than significant.

Domestic Water – The Hesperia Water District (HWD) provides water to most of the city Of Hesperia, including the project site. HWD water supplies consist of groundwater from the Upper Mohave River Valley Groundwater Basin ("basin"), recycled water, and imported water from northern California used to recharge the basin (Hesperia Water District, 2021, p. 3-1). HWD forecasts that it will have sufficient water supplies to meet demands in its service area over the 2025-2045 period in normal and drought conditions (Hesperia Water District, 2021, pp. 3-1 and 5-1). HWD water supplies, and water supply reliability are discussed further below in Section 4.19-b.

Hydrogen Fueling Station

The HFS does not include fixtures that would use water. Water is not used for extinguishing hydrogen fires; cessation of fuel flow is required for extinguishing. Therefore, HFS operation would have no impact on water supplies.

Transfer Hub

The proposed transfer hub includes restrooms, a drinking fountain, and a staff break room. No water demand factor for a bus station is available; water demand is estimated here using 125 percent of the wastewater generation factor for mini-mall use (the additional 25 percent is to account for landscape irrigation use).[18] The water demand factor is 100 gallons per day per 1,000 square feet (City of Los Angeles, 2006, p. M.2-24). The proposed building would be 1,777 square feet; thus, estimated water use is 178 gpd. Sufficient water supplies are available in the region for estimated project water demand, and impacts would be less than significant.

Stormwater – Storm drainage in much of Hesperia consists of onsite retention basins and runoff in curb and gutter (ECI, 2010, p. 3-12). Several streams pass through Hesperia, including the Mojave River along the east and south city boundaries, and several tributaries of the Mojave River extending east and/or south across the city (MBA, 2010, p. 3.8-1).

[18] The wastewater generation factor for mini-malls is used because most customers at mini-malls are onsite relatively briefly, as is the case with transit passengers at a transfer hub.

Hydrogen Fueling Station

The project includes installation of a storm drain inlet within the proposed equipment enclosure and a short storm drain discharging to an existing storm drain next to the north side of the existing gasoline dispensers in the existing operations and maintenance facility (Strandberg, 2025b).

Transfer Hub

The proposed transfer hub includes an infiltration basin in the southeast part of the HTH site with capacity of 10,000 cubic feet; that is sufficient for the net increase in runoff from the site in post-project compared to pre-project conditions from a two-year, 24-hour storm (Calland Engineering, 2024, p. 4-9). HTH development would not require construction of off-site storm drainage improvements, and impacts would be less than significant.

Electric Power: Southern California Edison (SCE) provides electricity to the city of Hesperia. Electricity demand in SCE's service area is forecast to increase from 95,262 gigawatt-hours (GWh; one GWh equals one million kilowatt-hours) in 2023 to 126,709 GWh in 2040 (CEC, 2025).

Hydrogen Fueling Station

Operation of the HFS would involve the use of electricity for pumping and chilling hydrogen. Adequate electricity supplies are available in the region for HFS electricity demands, and HFS operation would not require the construction of new or expanded electricity facilities.

Transfer Hub

Operation of the HTH would use electricity for lighting, heating and cooling, and electric appliances and devices. The project would be constructed in accordance with applicable Title 24 regulations and would not require the construction or relocation of electric power facilities. Therefore, a less than significant impact would occur.

Natural Gas: The proposed development would be all-electric and no impacts on natural gas supplies or natural gas distribution infrastructure would occur.

Telecommunications Facilities: Spectrum, Frontier Communications, Hughesnet, and Viasat provide internet service near the project site (highspeedinternet.com, 2025). It is expected that facilities of one of the telecommunications providers would be extended into the project site from existing lines in adjacent roadways. The proposed project would not interfere with operation of telecommunications facilities, and therefore a less than significant impact would occur.

b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less than Significant Impact

Water Supplies and Demands

HWD provides water to most of the city Of Hesperia, including the project site. HWD water supplies consist of groundwater from the Upper Mohave River Valley Groundwater Basin ("basin"), recycled

water, and imported water from northern California used to recharge the basin (Hesperia Water District, 2021, p. 3-1). HWD forecasts that it will have sufficient water supplies to meet demands over the 2025-2045 period in normal, single-dry-year, and multiple-dry-year conditions, as shown below in **Table 4.19-1** for normal and single-dry-year conditions, and in **Table 4.19-2** for five consecutive dry years (HWD, 2021, pp. 5-2 and 5-3).

Table 4.19-1
HESPERIA WATER DISTRICT WATER SUPPLY RELIABILITY

	2025	2030	2035	2040	2045
Normal Year Conditions					
Supply	15,250	16,290	16,990	17,740	18,420
Demand	15,250	16,290	16,990	17,740	18,420
Difference	0	0	0	0	0
Single Dry Year Conditions					
Supply	15,250	16,290	16,990	17,740	18,420
Demand	15,250	16,290	16,990	17,740	18,420
Difference	0	0	0	0	0

Source: HWD, 2021

Table 4.19-2
HESPERIA WATER DISTRICT WATER SUPPLY RELIABILITY

Year		2025	2030	2035	2040	2045
1	Supply	15,250	16,290	16,990	17,740	18,420
	Demand	15,250	16,290	16,990	17,740	18,420
	Difference	0	0	0	0	0
2	Supply	15,460	16,430	17,140	17,880	18,540
	Demand	15,460	16,430	17,140	17,880	18,540
	Difference	0	0	0	0	0
3	Supply	15,670	16,570	17,290	18,020	18,660
	Demand	15,670	16,570	17,290	18,020	18,660
	Difference	0	0	0	0	0
4	Supply	15,880	16,710	17,440	18,160	18,780
	Demand	15,880	16,710	17,440	18,160	18,780
	Difference	0	0	0	0	0
5	Supply	16,090	16,850	17,590	18,300	18,900
	Demand	16,090	16,850	17,590	18,300	18,900
	Difference	0	0	0	0	0

Source: HWD, 2021

Hydrogen Fueling Station

The hydrogen fueling station does not include fixtures that would use water. No impact would occur.

Transfer Hub

The estimated water demand by Transfer Hub operation is 178 gpd (see **Section 4.19.a** above for further discussion). Adequate water supplies are present in the region to meet estimated project water demands, and impacts would be less than significant.

c) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less than Significant Impact

As described under Threshold 4.19a above, there would be sufficient capacity available at VVWRA' treatment plant and at the Hesperia Subregional Water Recycling facility for estimated project wastewater generation, and impacts would be less than significant.

d) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less than Significant Impact

Nearly all of the solid waste landfilled from Hesperia is disposed of at the Victorville Sanitary Landfill just north of the city of Victorville (CalRecycle, 2025a). The Victorville Sanitary Landfill has residual disposal capacity of 1,872 tons per day, as shown below in **Table 4.19-3** (CalRecycle, 2025b and 2025c). Advance Disposal Company collects solid waste from Hesperia.

Table 4.19-3
LANDFILLS SERVING HESPERIA

Facility and Nearest City/Community	Remaining Capacity, cubic yards	Daily Permitted Disposal Capacity, tons	Actual Daily Disposal, tons[1]	Residual Daily Disposal Capacity, tons	Estimated Closing Date
Victorville Sanitary Landfill	79,400,00	3,000	1,128	1,872	2047

[1] Daily disposal calculated based on annual disposal tonnage assuming 300 operating days per year: that is, six days per week less certain holidays.
Sources: CalRecycle. 2025a; CalRecycle, 2025b; CalRecycle, 2025c.

Hydrogen Fueling Station

HFS operation is not expected to generate substantial amounts of solid waste. No adverse impact on solid waste disposal capacity would occur.

Transfer Hub

Public and institutional land uses are estimated to generate about 0.007 pound of solid waste per square foot per day (CalRecycle, 2006). The proposed transfer hub building would be 1,777 square feet; thus, estimated solid waste generation would be about 12 pounds per day. Adequate solid waste

disposal capacity is available in the region for estimated project solid waste generation, and impacts would be less than significant.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less Than Significant Impact

The following analysis applies to both the hydrogen fueling station and the transfer hub.

In 1989, the California Legislature enacted the California Integrated Waste Management Act (AB 939), to address solid waste problems and capacities in a comprehensive manner. The law required each city and county to divert 50 percent of its waste from landfills by the year 2000. The city has established several programs in partnership with Advance Disposal Company that promote recycling, composting, and waste reduction. The programs include bulky item and E-waste collection services, commercial recycling program, residential curbside recycling program, and outreach and education (City of Hesperia 2025c). The transfer hub project includes a storage area for recyclable materials, and project development would not interfere with compliance with AB 939 by the City of Hesperia.

Assembly Bill 341 (AB 341; Chapter 476, Statutes of 2011) increases the statewide waste diversion goal to 75 percent by 2020, and mandates recycling for commercial and multi-family residential land uses. The project would include storage areas for recyclable materials in accordance with AB 341.

Assembly Bill 1826 (AB 1826; California Public Resources Code §§ 42649.8 et seq.) requires recycling of organic matter by businesses, and multifamily residences of five of more units, generating such wastes in amounts over certain thresholds. Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste. Project operation would include recycling of landscape maintenance waste. The project does not include food preparation or food processing facilities and thus is unlikely to generate food waste in the amount where recycling of food waste would be required under AB 1826.

The proposed project would comply with applicable local, state and federal solid waste disposal standards; therefore, impacts would be less than significant.

4.20 Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				**X**
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?				**X**
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				**X**
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				**X**

a) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact

As shown in **Figure 4.9-2 in Section 4.9 of this IS/MND**, the project site is not located in a Very High Fire Hazard Severity Zone (VHFHSZ) within a Local Responsibility Area (LRA; i.e., where cities or counties are responsible for the costs of wildfire prevention and suppression). The nearest VHFHSZ in LRA to the project site is about 6.7 miles to the southeast in the City of Hesperia. The project site is not located in a State Responsibility Area (SRA; i.e., where the State is responsible for the costs of wildfire prevention and suppression). The nearest SRA to the project site is in unincorporated San Bernardino County, approximately 2.8 miles to the east (see **Figure 4.9-3**; CAL FIRE, 2025). Therefore, the proposed project would have no impact in this regard.

b) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact

The project site is not located in or near VHFHSZs. No slopes are on or near the project site which could exacerbate wildfire risks. Warm, dry, seasonal Santa Ana winds occur occasionally in southern California, typically between October and March. However, Hesperia is no more prone to Santa Ana winds than most other lowland places in southern California. Thus, the project would not expose project occupants to pollutant concentrations from wildfire, or the uncontrolled spread of a wildfire and the proposed project would have no impact in this regard.

c) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact

The project site is not located in an SRA (CAL FIRE, 2025), nor is the project site in or near a VHFHSZ. The project would not require the installation or maintenance of infrastructure that may exacerbate fire risk. Therefore, the proposed project would have no impact in this regard.

d) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact

The project site is not located in or near state responsibility areas or lands classified as VHFHSZ. The proposed project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. The project site is flat, is not in an area with high slopes or unstable ground conditions and is not within a landslide hazard zone. Therefore, the project would have no impact in this regard.

4.21 Mandatory Findings of Significance

Does the project have:	Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		**X**		
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			**X**	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		**X**		

a) Would the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant Impact with Mitigation Incorporated

The proposed Hydrogen Fueling Station and Hesperia Transfer Hub projects have the potential to affect biological and cultural resources. However, with the incorporation of mitigation measures, these impacts would not substantially degrade environmental quality or eliminate sensitive biological or cultural features.

Indirect impacts to nesting birds within the Biological Study Area could occur during construction due to increased noise, dust, and human activity. These disturbances may lead to nest abandonment, reduced feeding frequency, or increased nestling mortality, which would constitute a significant impact. To address this, standard construction mitigation measures **(MM) BIO-1** through **MM BIO-6** will be implemented. These include pre-construction nesting bird surveys and the use of qualified biological monitors during construction, as necessary. With these measures in place, impacts to nesting birds protected under the Migratory Bird Treaty Act and/or the California Fish and Game Code would be reduced to less than significant.

The Hesperia Transfer Hub project site supports 30 Western Joshua trees, a Candidate species under the California Endangered Species Act, as described in **Section 4.4** of this Initial Study. An additional Joshua tree was documented within a 50-foot buffer area surrounding the site. Both direct and indirect impacts to Western Joshua trees are anticipated as a result of project construction. Therefore, a California Fish and Game Code § 2081 Incidental Take Permit, included as **MM BIO-7**, will be required. The ITP may include requirements for on-site or off-site mitigation, development of a monitoring plan, and/or payment of mitigation fees to the California Department of Fish and Wildlife In addition, mitigation will be required to comply with native desert vegetation protection standards outlined in the City of Hesperia Municipal Code. Implementation of these measures will reduce impacts to Western Joshua tree to a less than significant level.

Furthermore, no other special-status wildlife species or essential habitats would be substantially affected with the implementation of **MM BIO-1** through **MM BIO-10**.

No known archaeological or historical resources have been identified on the project site. However, in accordance with CEQA Guidelines §15064.5 and Public Resources Code §21083.2, the project includes **MM CUL-1, MM CUL-2**, and **MM TCR-1** through **MM TCR-3.** These measures require the immediate cessation of ground-disturbing activities and the evaluation of any previously undiscovered cultural or tribal cultural resources encountered during construction.

As a result, the project would not eliminate or substantially alter important examples of California history or prehistory, and potential impacts would be reduced to a less than significant level.

b) Would the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less than Significant Impact

The proposed Hydrogen Fueling Station and Hesperia Transfer Hub projects have the potential to contribute incremental environmental effects in areas such as biological resources, cultural and tribal cultural resources during construction and operation. While each individual impact may be limited, CEQA Guidelines §15064(h)(1) requires that these incremental effects be evaluated in the context of other past, present, and reasonably foreseeable future projects to determine if they would result in a cumulatively considerable impact.

A review of the City of Hesperia's online permit tracking system showing recent planning documents, including current and proposed development projects does not indicate much development activity within a 0.5-mile radius of the project area. Any discretionary land use activity that would occur within the 0.5-mile radius will be required to go through the CEQA process, where mitigation will be required if impacts are identified. As shown in this analysis, implementation of mitigation measures identified in this Initial Study will reduce all impacts associated with implementation of the proposed project to less than significant levels. In addition, as part of the planning approval process for the proposed project, a Conditional Use Permit (CUP) will be required. Implementation of project mitigation measures identified herein, and all conditions included in the CUP approval will ensure that any overlapping or synergistic environmental impacts with other projects is less than significant.

c) Would the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant Impact with Mitigation Incorporated

Site clearance, grading, and construction activities associated with the project could result in potentially significant impacts to protected wildlife and plant species. These species contribute to local biodiversity, ecosystem stability, and environmental quality, which in turn support human well-being by maintaining clean air, water, and soil. Loss or degradation of such species and habitats could adversely affect ecosystem services that benefit surrounding communities. However, implementation of **MM BIO-1** through **MM BIO-10** would avoid or minimize these impacts and reduce them to a less than significant level.

The project has the potential to disturb previously unknown archaeological, tribal cultural, or burial resources during grading and excavation. While such resources may not directly affect human health, their damage or destruction could cause substantial adverse effects on human beings, particularly among Indigenous communities and other cultural stakeholders. Cultural resources often carry significant spiritual, historical, and educational value. Their loss can result in cultural harm, loss of heritage, and emotional distress among affected communities, and may be perceived as a disregard for cultural traditions and legal protections.

To address this, the project includes **MM CUL-1** and **MM CUL-2**, which require cessation of work and qualified evaluation if archaeological resources or human remains are discovered. In addition, **MM TCR-1** through **MM TCR-3** provides for tribal consultation, monitoring, and treatment of any tribal cultural resources in coordination with interested Tribes. Implementation of these measures will ensure that potential adverse effects to human beings from the loss or disturbance of culturally significant resources are reduced to less than significant.

Fossil resources could also be present in site soils and may be damaged during excavation and grading. While fossils themselves do not directly affect human health or the physical environment in the way that air pollution, hazardous materials, or noise might. However, there is an indirect connection when it comes to paleontological resources**.** Paleontological resources, while not directly hazardous to human health, hold scientific and cultural significance. Their loss would represent a degradation of nonrenewable resources that contribute to the broader understanding of Earth's history. The destruction of significant fossil deposits without mitigation could diminish educational and research opportunities for current and future generations, which may indirectly affect human well-being. However, implementation of **MM GEO-1** would ensure that fossil resources are appropriately identified, recovered, and documented, thereby reducing any indirect adverse effect on human beings to a less than significant level.

5.0 REFERENCES

AECOM, 2021, Victor Valley Transit Authority, Hydrogen Fueling Station Project, Biological Resources Technical Memorandum. December 7, 2021.

ARB, 2008. Climate Change Scoping Plan: a framework for change. California Air Resources Board. May 2008.

ARB, 2025. iADAM Air Quality Data Statistics. California Air Resources Board. http://www.arb.ca.gov/adam. Accessed June 4, 2025.

ARB, 2019. Innovative Clean Transit (ICT) Regulation Fact Sheet. Accessed online at https://ww2.arb.ca.gov/resources/fact-sheets/innovative-clean-transit-ict-regulation-fact-sheet on June 19, 2025.

ARB, 2022. 2022 Scoping Plan. Accessed online at https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents, on March 31, 2025.

Ardagh et al, 2014. Drop-in Hydrogen Fueling. Accessed online at https://design.cbe.cornell.edu/index.php?title=Drop-in_Hydrogen_Fueling_(2014)#Noise_Analysis, on May 29, 2025.

ARB, 2024. Current California GHG Emission Inventory Data.2000-2022 GHG Inventory (2024 Edition). Accessed online at https://ww2.arb.ca.gov/ghg-inventory-data on June 3, 2025.

Barbir, Frano, 2012. Safety Issues of Hydrogen in Vehicles. Accessed online at https://courses.grainger.illinois.edu/npre470/sp2019/web/readings/Hydrogen%20safety%20issues.pdf, on April 18, 2025.

Beherec, Marc and Allison Hill, 2021a. Victor Valley Transit Authority, Hydrogen Fueling Facility Project Cultural Resources Technical Memorandum. Prepared for: Victor Valley Transit Authority, Stuart Geltman. Prepared by AECOM. October 29, 2021.

Bell, Alyssa, 2025. Paleontological resources records search for the Hydrogen Fueling Station and Transfer Hub Project. Natural History Museum of Los Angeles County. Prepared for UltraSystems.

CA Governor's Office of Land Use and Climate Innovation, 2025. Tribal Cultural Resources (AB 52). Accessed online at https://lci.ca.gov/ceqa/tribal/on June 6, 2025.

CalFire, 2025. FHSZ Viewer. Accessed online at https://experience.arcgis.com/experience/03beab8511814e79a0e4eabf0d3e7247/ on June 6, 2025.

Calland Engineering and Associates, Inc., 2024a. Drainage Study For VVTA Hesperia Transfer Hub Vacant Lot, Smoke Tree Street,, Hesperia, CA 92345. Prepared for UltraSystems.

Calland Engineering and Associates, Inc., 2024b. Mojave River Watershed Water Quality Management Plan for: VVTA Hesperia Transfer Hub. Prepared for Victor Valley Transit Authority. Prepared for UltraSytems.

CalRecycle (California Department of Resources Recycling and Recovery), 2025a. RDRS Report 2: Jurisdiction Disposal and Beneficial Reuse by Destination. Accessed online at https://www2.calrecycle.ca.gov/RecyclingDisposalReporting/Reports/JurisdictionDisposalAndBeneficial, on February 6, 2025.

CalRecycle (California Department of Resources Recycling and Recovery), 2025b. SWIS Facility Detail: Victorville Sanitary Landfill. Accessed online at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1870?siteID=2652, on February 6, 2025.

CalRecycle (California Department of Resources Recycling and Recovery), 2025c. Landfill Tonnage Reports. Accessed online at: at: https://www2.calrecycle.ca.gov/LandfillTipFees/, on February 6, 2025.

CalRecycle (California Department of Resources Recycling and Recovery), 2025d. Estimated Solid Waste Generation Rates. Accessed online at: https://www2.calrecycle.ca.gov/WasteCharacterization/General/Rates, on February 6, 2025.

Caltrans (California Department of Transportation), 2022. Highway Design Manual. Chapter 610: Pavement Engineering Considerations. Accessed online at https://dot.ca.gov/-/media/dot-media/programs/design/documents/chp0610-092923-a11y.pdf, on June 5, 2025.

CAPCOA, 2008. CEQA & Climate Change. Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act. California Air Pollution Control Officers Association, January. Accessed online t https://ww2.energy.ca.gov/2008publications/CAPCOA-1000-2008-010/CAPCOA-1000-2008-010.pdf, on June 6, 2025.

CAPCOA, 2022. California Emissions Estimator Model®, Version 2022.1.1.29. California Air Pollution Control Officers Association. June 4, 2025.

CASGEM (California Statewide Groundwater Elevation Monitoring Program), 2022. Well Details for State Well Number 01N05W32N001S. Available at https://www.casgem.water.ca.gov/. Accessed on March 8, 2022.

CBWCD (Chino Basin Water Conservation District) 2022. Where Does Our Water Come From? https://www.cbwcd.org/386/Where-Does-Our-Water-Come-From

CDF (California Department of Finance), 2024. E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2021- 2024. Accessed online at: https://dof.ca.gov/wp-content/uploads/sites/352/Forecasting/Demographics/Documents/E-5_2024_InternetVersion.xlsx, on March 4, 2025.

CDFG (California Department of Fish and Game), 2012. Staff Report on Burrowing Owl Mitigation, State of California Natural Resources Agency. March 7, 2012. Accessed online at https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843&inline on June 1, 2025.

CDFW (California Department of Fish and Wildlife), 2023. California Department of Fish and Wildlife Mohave Ground Squirrel Survey Guidelines. January 2003; revised July 2010, October 2023.

Accessed online at https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83975&inline on June 19, 2025.

CDFW, 2025a. Western Joshua Tree Conservation Act Incidental Take Permit Application and Review Process. Accessed online at https://wildlife.ca.gov/Conservation/Environmental-Review/WJT/Permitting/WJTCA-ITP-Process on June 18, 2025.

CDFW, 2025b. Western Joshua Tree Conservation Act Mitigation Fee Map. Accessed online at https://experience.arcgis.com/experience/40690ac231124bccb07cbce42fc95ebd/ on June 18, 2025.

CDFW, 2025c. Western Joshua Tree Conservation Act Incidental Take Permit. Calculating Mitigation Fees. Accessed online at https://wildlife.ca.gov/Conservation/Environmental-Review/WJT/Permitting/WJTCA-ITP on June 18, 2025.

CEC, 2022. 2022 Building Energy Efficiency Standards for Residential and Nonresidential Buildings: For the 2022 Building Energy Efficiency Standards Title 24, Part 6, and Associated Administrative Regulations in Part 1. Accessed online at https://www.energy.ca.gov/publications/2022/2022-building-energy-efficiency-standards-residential-and-nonresidential, on April 8, 2025.

CEC, 2024. Annual Oil Supply Sources To California Refineries. Accessed online at https://www.energy.ca.gov/data-reports/energy-almanac/californias-petroleum-market/annual-oil-supply-sources-california on June 4, 2025.

CEC (California Energy Commission), 2025. California Energy Demand 2024-2040 Baseline Forecast. Accessed online on June 5, 2025 at: https://efiling.energy.ca.gov/GetDocument.aspx?tn=262787.

CEMA, CGS, and USC (California Emergency Management Agency, California Geological Survey, and University of Southern California), 2009. Tsunami Inundation Map for Emergency Planning: County of Los Angeles, California. Scale 1:24,000. Available at https://www.conservation.ca.gov/cgs/tsunami/maps.

City of Hesperia, 1997. Protected Native Vegetation. Accessed online at https://www.cityofhesperia.us/DocumentCenter/View/1765/PL-16-PROTECTED-VEGETATION-5-29-09?bidId= on June 1, 2025.

City of Hesperia, 2010. City of Hesperia General Plan Noise Element. Accessed online at https://www.hesperiaca.gov/DocumentCenter/View/15728/General-Plan-Update-August-2019, on June 5, 2025.

City of Hesperia, 2019a. City of Hesperia General Plan. Accessed online at https://www.cityofhesperia.us/DocumentCenter/View/15728/General-Plan-Update-August-2019 , on March 14, 2025.

City of Hesperia, 2023a. Summary Of Land Use / Zoning And Permitted Uses. Accessed at https://www.hesperiaca.gov/DocumentCenter/View/16757/Summary-of-Zoning-Districts-021021UPDATED-FOR-NEW-LAND-USE on June 5, 2025.

City of Hesperia, 2025. 2024 Local Hazard Mitigation Plan. Adopted May 22, 2025. Accessed online at Local Hazard Mitigation Plan | City of Hesperia - Official Website on June 6, 2025.

City of Hesperia, 2025a. Industrial Design Guidelines. https://library.municode.com/ca/hesperia/codes/code_of_ordinances?nodeId=TIT16DECO_CH16.16LAUSDE_ARTXIIINDEGU , on March 17, 2025.

City of Hesperia. 2025b. Police. Accessed online on April 25, 2025 at https://www.cityofhesperia.us/306/Police.

City of Hesperia. 2025c. Trash & Recycling. Accessed online at: https://www.cityofhesperia.us/286/Trash-Recycling, on February 6, 2025.

City of Hesperia Municipal Code, 2002. Article V. – General Performance Standards. Accessed online at https://library.municode.com/ca/hesperia/codes/code_of_ordinances?nodeId=TIT16DECO_CH16.20GERE_ARTVGEPEST_16.20.125NO, on June 5, 2025.

City of Los Angeles, 2006. CEQA Thresholds Guide. Accessed online at: https://planning.lacity.org/eir/CrossroadsHwd/deir/files/references/A07.pdf, on February 6, 2025.

DOC (Department of Conservation), 1993. Mineral Land Classification Map - Concrete Aggregate Resources Barstow-Victorville Area. Accessed on March 13, 2025.

DOC, 2015. Mojave Desert Geomorphic Province. Dated 2015. Accessed online at https://www.conservation.ca.gov/cgs/Documents/Publications/Special-Reports/SR_230-GeoGems-Notes-LR/CGS_SR230_MojaveDesert_GeomorphProvince_lr.pdf on June 6, 2025.

DOC, 2016. California Important Farmland Finder. Accessed online at https://maps.conservation.ca.gov/DLRP/CIFF/ on in March 10, 2025.

DOC, 2025a. CGS Information Warehouse: Mineral Land Classification. Accessed online at https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlcon, on March 13, 2025.

DOC, 2025b. Cal Gem GIS Well Finder. Accessed online at https://maps.conservation.ca.gov/doggr/wellfinder/, on March 13, 2025.

DWR (California Department of Water Resources), 2004. Bulletin 118: California's Groundwater, Upper Mojave River Groundwater Basin (Groundwater Basin Number 6-042). Last updater Last update February 27, 2004. Available at https://data.cnra.ca.gov/dataset/12e534ff-f604-4ba9-82db-486d81e082ff/resource/c59244a0-570f-4041-8e06-c4c177feaa0c/download/b118_2003_basindescription_6_042.pdf, Accessed on February 17, 2025.

DWR (California Department of Water Resources), 2025a. Division of Safety of Dams, California Dam Breach Inundation Maps. Available at https://fmds.water.ca.gov/webgis/?appid=dam_prototype_v2 . Accessed on February 17, 2025.

DWR, 2025b. DWR (Department of Water Resources), 2025b. SGMA [Sustainable Groundwater Management Act] Data Viewer. Accessed online on June 5, 2025 at: https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#gwlevels.

ECI (Earth Consultants International), 2010. Technical Background Report to The Safety Element of The General Plan for The City Of Hesperia. Accessed online at: https://www.cityofhesperia.us/DocumentCenter/View/19226, on February 6, 2025.

EDD (Employment Development Department), 2025. Monthly Labor Force Data for Counties. Accessed online at: https://labormarketinfo.edd.ca.gov/file/lfmonth/countyur-400c.pdf on May 2, 2025.

ESRL, 2020. Recent Global Monthly Mean CO_2. Trends in Atmospheric Carbon Dioxide. Earth System Research Laboratory. National Oceanic and Atmospheric Administration. https://www.esrl.noaa.gov/gmd/ccgg/trends/global.html. Accessed June 4, 2025.

EPA, 2022. Climate Change Indicators: U.S. Greenhouse Gas Emissions. Accessed online at https://www.epa.gov/climate-indicators/climate-change-indicators-us-greenhouse-gas-emissions on June 3, 2025.

FEMA (Federal Emergency Management Agency), 2025. National Flood Hazard Layer (NFHL) Viewer. Available at: https://hazards-fema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444d4879338b5529aa9cd, Accessed on February 17, 2025.

FTA, 2006. Transit Noise and Vibration Impact Assessment. Accessed online at https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf , on June 5, 2025.

FTA, 2018. Transit Noise and Vibration Impact Assessment. Accessed online at https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf , on June 5, 2025.

GMI, 2019. What is a Global Warming Potential? And Which One Do I Use? GHG Management Institute. https://ghginstitute.org/2010/06/28/what-is-a-global-warming-potential/. Accessed June 4, 2025.

Google Earth Pro, 2025. City of Hesperia, San Bernardino County, California, U.S.A. 34.423781° -117.288088°. Eye altitude 8,023 feet. Imagery date March 17, 2025. Accessed on June 5, 2025.

OPR (Governor's Office of Planning and Research), 2017. General Plan Guidelines: 2017 Update. Accessed online at http://opr.ca.gov/planning/general-plan/guidelines.html , accessed on June 5, 2025.

Hendriks, R., Rymer, B., Buehler, D., And Andrews, J., 2013. Technical Supplement to the Caltrans Traffic Noise Analysis Protocol. Division of Environmental Analysis, Sacramento, CA. Accessed online at https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf, on June 6, 2025.

HES (Hernandez Environmental Services), 2025a. Results of a Western Joshua Tree Census for the Victor Valley Transit Authority Hydrogen Fueling Station site located in the city of Hesperia, San Bernardino County, California. April 28, 2025.

HES, 2025b. General Biological Assessment for the Victor Valley Transit Authority Hesperia Transfer Hub project site (Assessor's Parcel Number 0410-121-05) located within the City of Hesperia, San Bernardino County, California. May 9, 2025.

Hesperia Water District. 2021. 2020 Urban Water Management Plan. Accessed online at: https://wuedata.water.ca.gov/public/uwmp_attachments/6202542960/Hesperia%202020%20UWMP%20Final.pdf, on February 6, 2025.

Highspeedinternet.com, 2025. Search Internet Providers by Zip Code. Accessed online at: https://www.highspeedinternet.com/view-plans3?utm_source=google&utm_medium=paid_search&utm_campaign=14922232533&utm_content=127067854534&utm_term=kwd-363127659&aff_unique5=CjwKCAiA2JG9BhAuEiwAH_zf3lRfErZhZZFYR-ijuJAChG5Yywkp2RzebZWtfID9nLxSYHPafaqZhBoCpg0QAvD_BwE&gad_source=1&gclid=CjwKCAiA2JG9BhAuEiwAH_zf3lRfErZhZZFYR-ijuJAChG5Yywkp2RzebZWtfID9nLxSYHPafaqZhBoCpg0QAvD_BwE, on February 6, 2025.

HRPD (Hesperia Recreation and Park District), 2025. Parks & Facilities. Accessed online at: https://www.hesperiaparks.com/parks-facilities/, on February 7, 2025.

Huitt-Zollars, 2010. Storm Drain Plan, Victor Valley Transit Authority Administration, Operations, and Maintenance Facility. Received via email from Dustin Strandberg, VVTA, March 20, 2025.

HWD (Hesperia Water District), 2021. 2020 Urban Water Management Plan. Accessed online at: https://wuedata.water.ca.gov/public/uwmp_attachments/6202542960/Hesperia%202020%20UWMP%20Final.pdf, on February 6, 2025.

Idaho DOT (Idaho Department of Transportation), 2017. Quality Assurance Manual. Section 550: Resistance R-Value and Expansion Pressure of Compacted Soils and Aggregates. Accessed online at: https://apps.itd.idaho.gov/apps/manuals/LabOperations/Tests/IT-8.pdf, on February 14, 2025.

MBA (Michael Brandman Associates), 2010. Draft Environmental Impact Report for the City of Hesperia General Plan Update. Accessed online at: https://www.cityofhesperia.us/DocumentView.aspx?DID=1588, on February 6, 2025.

MDAQMD (Mojave Desert Air Quality Management District), 1995. Final Mojave Desert Planning Area, Federal Particulate Matter (PM10) Attainment Plan. Accessed online at https://www.mdaqmd.ca.gov/home/showpublisheddocument/176/636305689057870000, on June 4, 2025.

MDAQMD, 2008. Federal 8-Hour Ozone Attainment Plan (Western Mojave Desert Non-attainment Area). Accessed online at https://www.mdaqmd.ca.gov/home/showpublisheddocument/168/636305690088330000, on June 4, 2025.

MDAQMD (Mojave Desert Air Quality Management District), 2016, California Environmental Quality Act (CEQA) and Federal Conformity Guidelines. August. Accessed online at: https://www.mdaqmd.ca.gov/home/showpublisheddocument/192/636305688064730000, Accessed on June 4, 2025.

MDAQMD, 2020a. CEQA and Federal Conformity Guidelines. Accessed online at https://www.mdaqmd.ca.gov/home/showpublisheddocument/8510/637406182097070000, on June 4, 2025.

MDAQMD, 2022a. About MDAQMD. Accessed online at https://www.mdaqmd.ca.gov/about-us, on June 4, 2025.

Michael Brandman Associates, 2010a. City of Hesperia General Plan EIR. Accessed online at https://www.cityofhesperia.us/DocumentCenter/View/1588/Hesperia-2010-GPU-Draft-EIR-121610?bidId= , on March 14, 2025.

Michael Brandman Associates, 2010b. City of Hesperia Climate Action Plan. Accessed online at: http://www.cityofhesperia.us/DocumentCenter/View/1291/23660023-Hesperia-CAP-July-20?bidId=, accessed on September 26, 2022.

NASA, 2018. Global Climate Change: Vital Signs of the Planet. National Air and Space Administration. Accessed online at: https://climate.nasa.gov/evidence/. Accessed in August 2020.

NHTSA (National Highway Traffic Safety Administration), 2023. Notice of Proposed Rulemaking, Corporate Average Fuel Economy Standards for Model Years 2024-2026 Passenger Cars and Light Trucks, 86 FR 49602, August 3. Accessed online at https://www.federalregister.gov/documents/2021/09/03/2021-17496/corporate-average-fuel-economy-standards-for-model-years-2024-2026-passenger-cars-and-light-trucks, on June 4, 2025.

PRC (Public Resources Cose), 2015. CHAPTER 2.5. Definitions [21060 - 21074], Section 21074. (Added by Stats. 2014, Ch. 532, Sec. 4. (AB 52) Effective January 1, 2015.). Accessed online at https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=21074.&lawCode=PRC, on June 6, 2025.

Pringle, Weston, 2025a. Technical Analysis and Vehicle Miles Traveled (VMT) Screening for the Victor Valley Transit Authority (VVTA) Hesperia Transfer Hub Project. March 18, 2025.

Pringle, Weston, 2025b. Technical Analysis and Vehicle Miles Traveled (VMT) Screening for the Hydrogen Fueling Station Project. March 18, 2025.

RCA (RCA Associates, Inc.), 2024. Western Joshua Tree Census, Hesperia, California (Draft), Project No: RCA#2024-147 JT. December 5, 2024 (Updated January 3, 2025).

RWQCB (Santa Ana Regional Water Quality Control Board), 1995. Water Quality Control Plan for the Santa Ana River Basin (Basin Plan), with amendments effective 2016. Accessed online at https://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/, on June 6, 2025.

RWQCB (Lahontan Regional Water Quality Control Board), 2021. Water Quality Control Plan for the Lahontan Region. Section 4.3: Stormwater, Runoff, Erosion, and Sedimentation. Accessed online at https://www.waterboards.ca.gov/lahontan/water_issues/programs/basin_plan/docs/2025/ch4-2and4-3.pdf#page=7, on June 5, 2025.

RWQCB (Santa Ana Regional Water Quality Control Board), 2013, as amended. National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for Discharges from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds Within the San Diego Region (Order No. R9-2013-0001, which was amended in 2015 by Orders No. R9-2015-0001 and R9-2015-0100 [NPDES No. CAS0109266]). Available at: https://www.waterboards.ca.gov/sandiego/water_issues/programs/stormwater/sd_stormwater.html. Downloaded on March 15, 2021.

San Bernardino County, 2016. Mojave River Watershed Technical Guidance Document for Water Quality Management Plans. Accessed online at: https://www.cityofhesperia.us/DocumentCenter/View/15165/Technical-Guidance-for-WQMPPCMP, on February 17, 2025.

SBCFPD (San Bernardino County Fire Protection District), 2025. Fire Stations. Accessed online at: https://www.cityofhesperia.us/183/Fire-Stations, on February 7, 2025.

SBCL (San Bernardino County Library), 2025. Locations. Accessed online on April 18, 2025 at https://library.sbcounty.gov/library-locations/.

SBCSD (San Bernardino County Sheriff's Department), 2025. Hesperia Patrol Station. Accessed online at: https://wp.sbcounty.gov/sheriff/patrol-stations/hesperia/, on February 7, 2025.

SCAG (Southern California Association of Governments), 2024. Demographics and Growth Forecast. Accessed online at: https://scag.ca.gov/sites/main/files/file-attachments/23-2987-tr-demographics-growth-forecast-final-040424.pdf?1712261839, on March 4, 2025.

Strandberg, Dustin (Chief Maintenance Officer), 2025a. Written Data Needs Response. Received via email February 21, 2025.

Strandberg, Dustin (Chief Maintenance Officer), 2025b. Email to Michael Milroy dated March 20, 2025.

SWRCB (California State Water Resources Control Board), 2019. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. Adopted April 2, 2019, revised April 6, 2021. Available at https://www.waterboards.ca.gov/water_issues/programs/cwa401/wrapp.html.

Terracon, 2024. Proposed Hydrogen Station – Hesperia: Geotechnical Engineering Report. Dated April 25, 2024. Prepared for Lane Engineers, Inc.

TMD, 2024. Victor Valley Transit Authority COA [Comprehensive Operations Analysis]. Accessed online at: http://vvta.org/wp-content/uploads/2024/11/VVTA-COA-Final-Report-June-2024-1.pdf, on February 25, 2025.

Trillium, 2023. Victor Valley Transit Authority Hydrogen Safety Action Plan. Received via email from Dustin Strandberg, Victor Valley Transit Authority, on April 17, 2025.

UES, 2025a. Phase I Environmental Site Assessment - Hesperia Transfer Hub. Dated April 2, 2025.

UES, 2025b. Phase I Environmental Site Assessment - Hydrogen Fueling Station. Dated April 2, 2025.

University of California Riverside, 2025. Victor Valley Wastewater Reclamation Authority–Renewable Energy Storage Project and Recycled Water Project. Accessed online at: https://www.cert.ucr.edu/victor-valley-wastewater-reclamation-authority-renewable-energy-storage-project-and-recycled-water, on February 6, 2025.

USACE (U.S. Army Corps of Engineers), 2025. National Inventory of Dams. Accessed online at: https://nid.sec.usace.army.mil/#/, on February 17, 2025.

USCB (US Census Bureau), 2025a. Longitudinal Employer-Household Dynamics (LEHD). OnTheMap. Accessed online at: http://onthemap.ces.census.gov/, on March 4, 2025.

USCB (US Census Bureau), 2025b. DP05: ACS Demographic and Housing Estimates. Victorville-Hesperia and Barstow CCDs. Accessed online at: https://data.census.gov/table/ACSDP5Y2023.DP05?t=Population+Total&g=060XX00US0607190188,0607193555, on March 4, 2025.

USDA, 2015. Cajon Series. Accessed online at https://soilseries.sc.egov.usda.gov/OSD_Docs/C/CAJON.html on June 6, 2025.

USEPA (U.S. Environmental Protection Agency), 2025. WATERS GeoViewer. Available at https://www.epa.gov/waterdata/waters-geoviewer. Accessed on February 17, 2025.

USEPA, 2019a - Nitrogen Dioxide (1971) Maintenance Area (Redesignated from Nonattainment) State/Area/County Report.: Green Book. U.S. Environmental Protection Agency Current [https://www3.epa.gov/airquality/greenbook/nmcs.html]. Data as of September 30, 2019. Accessed June 4, 2025.

USEPA, 2019b. Overview of Greenhouse Gases. U.S. Environmental Protection Agency. https://www.epa.gov/ghgemissions/overview-greenhouse-gases. Accessed June 4, 2025 n.

USEPA (U.S. Environmental Protection Agency), 2025. Waters Geoviewer 2.0. Accessed online on at https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=074cfede236341b6a1e03779c2bd0692, on June 6, 2025.

USGS (US Geological Survey), 2006. Geologic Map of the San Bernardino and Santa Ana 30' X 60' Quadrangles, California. Accessed online at: http://pubs.usgs.gov/of/2006/1217/of2006-1217_map/of2006-1217_geol_map.pdf, on February 14, 2025.

USGS (U.S. Geological Survey), 2021. The Severity of an Earthquake. Accessed online at: https://pubs.usgs.gov/gip/earthq4/severitygip.html, on March 14, 2025.

USGS (U.S. Geological Survey), 2025. Areas of Land Subsidence in California. Accessed online on June 3, 2025 at: https://ca.water.usgs.gov/land_subsidence/california-subsidence-

areas.html.Verdantas, 2025. Geotechnical Exploration, Victor Valley Transit Authority, Hesperia Transfer Hub. Prepared for Psomas.

Vidal, R.A., 1991. Comprehensive Land Use Plan, Hesperia Airport. Prepared for San Bernardino County Airport Land Use Commission, Accessed online at: https://lus.sbcounty.gov/wp-content/uploads/sites/48/Airports/Hesperia.pdf, on June 3, 2025.

VVTA, 2024. Victor Valley Transit Authority COA Final Report - June 2024. Accessed online at http://vvta.org/wp-content/uploads/2024/11/VVTA-COA-Final-Report-June-2024-1.pdf on June 3, 2025.

VVTA (Victor Valley Transit Authority), 2025. Interactive Map. Accessed online at: https://vvta.org/interactive-map/, on January 29, 2025.

VVWRA (Victor Valley Wastewater Reclamation Authority), 2025a. Virtual Tour of the Wastewater Treatment Plant. Accessed online at: https://www.vvwraca.gov/departments/environmental-compliance/virtual-tour, on February 6, 2025.

VVWRA (Victor Valley Wastewater Reclamation Authority), 2025b. Subregionals. Accessed online at: https://www.vvwraca.gov/about-us/subregionals, on February 6, 2025.

WRCC, 2025. Western U.S. Climate Historical Summaries, Western Regional Climate Center. HESPERIA, CALIFORNIA (043935). https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca3935 Accessed on June 4, 2025.

6.0 LIST OF PREPARERS

6.1 CEQA Lead Agency

Dustin Strandberg, Chief Maintenance Officer
Victor Valley Transit Authority
17150 Smoke Tree Street,
Hesperia, CA 92345-8305
Email: dstrandberg@vvta.org

6.2 Project Applicant

Dustin Strandberg, Chief Maintenance Officer
Victor Valley Transit Authority
17150 Smoke Tree Street,
Hesperia, CA 92345-8305
Email: dstrandberg@vvta.org

6.3 UltraSystems Environmental, Inc.

6.3.1 Environmental Planning Team

Betsy Lindsay, MURP, ENV SP, Founder/CEO
Robert Manford, DPPD, MPl., President/Senior Project Manager
Billye Breckenridge, B.S., Deputy Project Manager/GIS Manager, QA/QC
Michael Milroy, MSc., Senior Planner

6.3.2 Technical Team

Amir Ayati, B.S., Staff Scientist
Andrew Soto, B.S., Word Processing/Technical Editing
Erik Segura, B.S., ENV SP, Associate Planner
Isha Shah, M.S., Staff Engineer/Scientist
Marissa Kassisieh, MURP, Associate Planner
Maritza Vasquez, M.A., GIS Analyst/Associate Planner
Megan Black, M.A., Archaeological Technician
Michael Milroy, B.S., Project Manager
Steven Borjeson, B.S., Senior Planner

6.3.3 Subconsultants

Hernandez Environmental Services – Biological Resources

UES - Phase I ESA

Wes Pringle – VMT Analysis

7.0 MITIGATION MONITORING AND REPORTING PROGRAM

The Mitigation Monitoring and Reporting Program (MMRP) has been developed in accordance with Public Resources Code § 21081.6 and CEQA Guidelines § 15097, which require all state and local agencies to adopt a monitoring or reporting program whenever project approval is based on a Mitigated Negative Declaration (MND) or an Environmental Impact Report (EIR). The MMRP is intended to ensure that mitigation measures (MM) identified during the environmental review process are effectively implemented, thereby reducing or avoiding the project's significant environmental impacts.

Monitoring refers to the systematic, ongoing, or periodic review of project activities to verify compliance with applicable mitigation measures. Reporting involves the submission of written documentation to the decision-making body or authorized staff to confirm that mitigation requirements have been fulfilled.

The primary objectives of this MMRP are to:

1. Provide a structured framework for documenting the implementation of all required mitigation measures;
2. Clearly identify the parties responsible for monitoring and reporting;
3. Maintain a verifiable record of compliance efforts throughout the duration of the project; and
4. Ensure that all mitigation measures within the purview of the City of Hesperia and/or the Applicant are fully implemented and enforced.

Table 7.0-1 below presents the MMRP in tabular form, summarizing:

- The environmental topic/impact area;
- The adopted mitigation measures;
- The responsible implementing party;
- Specific monitoring actions;
- The enforcement agency(ies); and
- The project phase (e.g., pre-construction, construction, or operation) during which each measure is to be carried out.

This MMRP includes only those environmental topics for which mitigation is required. Topics not listed were found to result in *no impact* or a *less than significant impact* pursuant to Public Resources Code § 21081.6 and CEQA Guidelines § 15097 and therefore do not require further mitigation or monitoring.

Table 7.0-1
MITIGATION MONITORING AND REPORTING PROGRAM

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
4.4 Biological Resources				
Threshold 4.4 a) Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	**MM BIO-1: Pre-Construction General Wildlife Survey** Special-status wildlife species that have no designated status under the ESA or the CESA but are designated as sensitive or locally important by federal agencies, state agencies, local agencies, and nonprofit resource organizations are also considered sensitive in this section. The following measures will be implemented to minimize impacts to these species. The measures below will help to reduce direct and indirect impacts caused by construction on various sensitive species to less than significant levels. • A qualified biologist shall conduct a pre-construction general wildlife survey for sensitive wildlife and potential nesting sites such as open ground, shrubs, and burrows within the limits of project disturbance. The survey shall be conducted at least seven days prior to the onset of scheduled activities, such as mobilization and staging. It will end no more than three days prior to vegetation, substrate, and structure removal and/or disturbance. • If sensitive species and/or active nesting sites are not observed during the pre-construction survey or they are observed and will not be impacted, project activities may begin, and no further mitigation will be required. • If any sensitive wildlife species are observed within the project site during the pre-construction survey, the biologist shall immediately map the area and notify the appropriate resource agency to determine suitable protection measures and/or mitigation measures and to determine if additional surveys or focused protocol surveys are	VVTA Qualified Biologist	Field Verification	1. VVTA 2. VVTA 3. Prior to Construction

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	necessary. Project activities may begin within the area only when concurrence is received from the appropriate resource agency. • Sensitive wildlife species and/or potential nesting sites shall not be disturbed, captured, handled or moved.			
	MM BIO-2: Pre-Construction Breeding Bird Survey To maintain compliance with the Migratory Bird Treaty Act (MBTA) and Fish and Game Code, and to avoid impacts or take of migratory non-game breeding birds, their nests, young, and eggs, the following measures shall be implemented. The measures below will help to reduce direct and indirect impacts caused by construction on migratory non-game breeding birds to less than significant levels. • Project activities that will remove or disturb potential nest sites, such as open ground, trees, shrubs, grasses, or burrows, during the breeding season would have a potential significant impact if migratory non-game breeding birds are present. Project activities that will remove or disturb potential nest sites shall be scheduled outside the breeding bird season to avoid potential direct impacts to migratory non-game breeding birds protected by the MBTA and Fish and Game Code. The breeding bird nesting season is typically from February 1 through September 15, but can vary slightly from year to year, usually depending on weather conditions. Removing all physical features that could potentially serve as nest sites will also help to prevent birds from nesting within the project site during the breeding season and during construction activities. • If project activities cannot be avoided during February 1 through September 15, a qualified biologist shall conduct a pre-construction breeding bird survey for breeding birds and active nests or potential nesting sites within the limits of project disturbance. The survey shall be conducted at least seven days prior to the onset of scheduled activities,	VVTA Qualified Biologist	Field Verification	1. VVTA 2. VVTA 3. Prior to Construction

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	such as mobilization and staging. It shall end no more than three days prior to vegetation, substrate, and structure removal and/or disturbance. • If no breeding birds or active nests are observed during the pre-construction survey or they are observed and will not be impacted, project activities may begin, and no further mitigation will be required. • If a breeding bird territory or an active bird nest is located during the pre-construction survey and will potentially be impacted, the site shall be mapped on engineering drawings and a no activity buffer zone shall be marked (fencing, stakes, flagging, orange snow fencing, etc.) a minimum of 100 feet in all directions or 500 feet in all directions for listed bird species and all raptors. The biologist shall determine the appropriate buffer size based on the type of activities planned near the nest and the type of bird that created the nest. Some bird species are more tolerant than others of noise and activities occurring near their nest. This no-activity buffer zone shall not be disturbed until a qualified biologist has determined that the nest is inactive, the young have fledged, the young are no longer being fed by the parents, the young have left the area, or the young will no longer be impacted by project activities. Periodic monitoring by a biologist shall be performed to determine when nesting is complete. Once the nesting cycle has finished, project activities may begin within the buffer zone. • If listed bird species are observed within the project site during the pre-construction survey, the biologist shall immediately map the area and notify the appropriate resource agency to determine suitable protection measures and/or mitigation measures and to determine if additional surveys or focused protocol surveys are necessary. Project activities may begin within the area only when concurrence is received from the appropriate resource agency.			

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	• Birds or their active nests shall not be disturbed, captured, handled or moved. Active nests cannot be removed or disturbed; however, nests can be removed or disturbed if determined inactive by a qualified biologist.			
	MM BIO-3: Focused Burrowing Owl Survey Although BUOW was not observed on site during the general wildlife survey, the BSA contains suitable habitat to potentially support BUOW in the future. A qualified biologist shall conduct a focused BUOW survey in accordance with the *Staff Report on Burrowing Owl Mitigation* (CDFW, 2012). • Following the completion of the survey, the biologist shall prepare a letter report summarizing the results of the survey. The report shall be submitted to the City prior to initiating any ground disturbance activities. • If no BUOWs or signs of BUOW are observed during the survey and concurrence is received from CDFW, project activities may begin, and no further mitigation shall be required. • If BUOW or signs of BUOW are observed during the survey, the site will be considered occupied. The biologist shall contact VVTA, City of Hesperia, and CDFW to assist in the development of avoidance, minimization, and mitigation measures, prior to commencing project activities. The list of potential measures to avoid and minimize impacts to BUOWs described below shall be implemented. **BUOW Protection Measures** • If BUOWs or signs of BUOW are observed during the survey, then the site shall be considered occupied and the biologist shall contact VVTA, City, and CDFW to assist in the development of avoidance, minimization, and mitigation measures discussed below, prior to commencing project activities.). If no BUOW or signs of BUOW are	VVTA Qualified Biologist	Field Verification	1. VVTA 2. VVTA 3. Prior to Construction

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	observed during the focused surveys, the components of this measure (discussed below) would not be applicable. **Planning BUOW Protection** • Grading, construction, and other project activities on all grassland habitat shall be delayed until the qualified biologist has implemented burrow exclusion and closure. No ground-disturbing activities within 165 feet of an active BUOW burrow will be permitted until burrow exclusion and closure have been implemented. No destruction of foraging habitat shall be permitted until burrow exclusion and closure have been implemented. **Preconstruction BUOW Protection** • Prior to the initiation of grading and construction activities, the biologist shall implement passive relocation of an active BUOW burrow by installing a one-way door and then permanently excluding the BUOW from returning once it is confirmed that no BUOW individuals remain in the burrow. A biological monitor shall visit the site daily to verify that the burrow is empty by monitoring and scoping the burrow. **Construction BUOW Protection Measures** • A biological monitor shall be onsite to monitor any BUOW or signs of BUOW. If any BUOW are observed then the biologist shall consult with the City and CDFW to determine the appropriate measure			
	MM BIO-4: Biological Monitor, Project Limits, and Designated Areas **Biological Monitor** A biological monitor shall monitor activities that result in tree or vegetation removal to minimize the likelihood of inadvertent impacts on nesting birds and special-status wildlife species, with special attention given to any protected	VVTA Qualified Biologist	Field Verification	1. VVTA 2. VVTA 3. Prior to and during Construction

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	species observed during the pre-construction breeding bird surveys. Monitoring shall also be conducted periodically during construction activities to ensure no new nests are built during any vegetation removal or demolition activities between February 1 and September 15. The biological monitor shall ensure that all BMPs, avoidance, protection and mitigation measures described in the relevant project permits and reports are in place and are adhered to. The biological monitor shall have the authority to temporarily halt all construction activities and all non-emergency actions if sensitive species and/or nesting birds are identified and would be directly affected. The monitor shall notify the appropriate resource agency and consult if needed. If necessary, the biological monitor shall relocate the individual outside of the work area where it will not be harmed. Work can continue at the location if the applicant and the consulted resource agency determine that the activity will not result in adverse effects on the species. The appropriate agencies shall be notified if a dead or injured protected species is located within the project site. Written notification shall be made within 15 days of the date and time of the finding or incident (if known) and must include location of the carcass, a photograph, cause of death (if known), and other pertinent information. **Project Limits and Designated Areas** To avoid impacts on sensitive biological resources, the project proponent shall implement the following measures prior to project construction and commencement of any ground-disturbing activities or vegetation removal. • Specifications for the project boundary, limits of construction, project-related parking, storage areas, laydown sites, and equipment storage areas shall be mapped and clearly marked in the field with temporary fencing, signs, stakes, flags, rope, cord, or other appropriate markers. Construction limits shall 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			

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	restricted to the construction areas. All markers shall be maintained until the completion of activities in that area. 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. • To minimize the amount of disturbance, the construction/laydown areas, parking areas, staging areas, storage areas, spoil areas, and equipment access areas shall be restricted to designated areas. To the extent possible, designated areas shall comprise existing disturbed areas (parking lots, access roads, graded areas, etc.). • Project related work limits shall be defined, and work crews shall be restricted to designated work areas. Disturbance beyond the actual construction zone is prohibited without site specific surveys. 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. If sensitive biological resources are detected in the area to be impacted, then appropriate measures shall be implemented to avoid impacts (i.e., flag and avoid, erect orange snow fencing, biological monitor present during work, etc.). However, if avoidance is not possible and the sensitive biological resources will be directly impacted by project activities, the biologist shall mark and/or stake the site(s) and map the individuals on an aerial map and with a GPS unit. The biologist shall then contact the appropriate resource agencies to develop additional avoidance, minimization and/or mitigation measures prior to commencing project activities. • The project proponent shall ensure that construction activities will include measures to prevent accidental falls into excavated areas. The construction crew shall inspect excavated areas daily to detect			

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	the presence of trapped wildlife. All deep or steep-walled excavated areas shall be covered with tarp, and either be furnished with escape ramps or be surrounded with exclusionary fencing to prevent wildlife from entering them. Wildlife found in excavation areas should be trapped and relocated out of harm's way to a suitable habitat outside of the project area, if possible.			
	MM-BIO 5: General Vegetation and Wildlife Avoidance Protection Measures The BSA contains habitats which can support many wildlife species. The following general avoidance and protection measures to protect vegetation and wildlife shall be implemented to the extent practical: • Cleared or trimmed vegetation and woody debris shall be disposed of in a legal manner at an approved disposal site. Cleared or trimmed non-native, invasive vegetation shall be disposed of in a legal manner at an approved disposal site as soon as possible to prevent regrowth and the spread of weeds. • 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. • Non-native species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible. • Vehicles and equipment shall be free of caked mud or debris prior to entering the project site to avoid the introduction of new invasive weedy plant species. • To minimize construction-related mortalities of nocturnally active species such as mammals and snakes, it is recommended that all work be conducted during daylight hours. Nighttime work (and use of artificial lighting) shall not be permitted unless specifically	VVTA Construction Contractor	Field Verification	1. VVTA 2. VVTA 3. During Construction

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	authorized. If required, night lighting shall be directed away from the preserved open space areas to protect species from direct night lighting. All unnecessary lights shall be turned off at night to avoid attracting wildlife such as insects, migratory birds, and bats. • If any wildlife is encountered during the course of project activities, said wildlife shall be allowed to freely leave the area unharmed. • Wildlife shall not be disturbed, captured, harassed, or handled. Animal nests, burrows and dens shall not be disturbed without prior survey and authorization from a qualified biologist. • Active nests of special-status or otherwise protected bird species cannot be removed or disturbed. Nests can be removed or disturbed if determined inactive by a qualified biologist. • To avoid impacts on wildlife and attracting predators of protected species, the project proponent shall comply with all litter and pollution laws and shall institute a litter control program throughout project construction. All contractors, subcontractors, and employees shall also obey these laws. These covered trash receptacles shall be placed at each designated work site and the contents shall be properly disposed at least once a week. Trash removal will reduce the attractiveness of the area to opportunistic predators such as common ravens, coyotes, northern raccoons, and Virginia opossums. • Contractors, subcontractors, employees, and site visitors shall be prohibited from feeding wildlife and collecting plants and wildlife. • Disturbance near ponded water shall be limited during the rainy season. It could serve as potential habitat for amphibians and sensitive invertebrates.			

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	MM BIO-6: Loggerhead Shrike Survey and Protection Measures The following measures are proposed to minimize impacts to loggerhead shrike, for which there is suitable habitat in the BSA. • If construction activities would commence during the breeding/nesting period, a wildlife survey shall be completed by a qualified biologist to identify potential loggerhead shrike activity in the area of the project activities. • Additional species surveys to determine presence/absence of birds prior to disturbances, from May 1 until the work start date, if the work start date is prior to August 31. Surveys are to occur weekly in May, every other week in June, and once per month in July and August (assuming no loggerhead shrike are observed). • Incidental occurrences of other sensitive avian species such as Swainson's hawk, prairie falcon, and Cooper's hawk should also be recorded during the survey.	VVTA Construction Contractor	Field Verification	1. VVTA 2. VVTA 3. Prior to Construction
	MM BIO-7: § 2081 FGC Incidental Take Permit Western Joshua trees are a state candidate for listing under CESA and will require a § 2081 FGC Incidental Take Permit (ITP) with compensatory mitigation for impacts. The exceptions and permitting process under the California Desert Native Plants Act and the separate exceptions under the Native Plant Protection Act will not apply to western Joshua tree in any manner. For projects where take is incidental to carrying out an otherwise lawful activity, an ITP may be obtained from CDFW. The incidental take permit issued by CDFW will contain a description of the proposed project and avoidance and minimization measures to reduce the project's impact on western Joshua trees. The applicant must satisfy all the	VVTA	Field Verification	1. VVTA 2. VVTA 3. Prior to Construction

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	conditions in the incidental take permit prior to implementing the project. Fees are required to be paid to the CDFW.			
	MM BIO-8: Focused Botanical Surveys (Hesperia Transfer Hub Site) Prior to construction activities: to avoid impacts to special-status plant species, a qualified biologist shall survey the BSA and project site for the presence of the special-status plant species with the potential to occur (White Pygmy Poppy, White-bracted Spineflower, Booth's Evening Primrose, Beaver Dam Breadroot). See the Appendix B species list in the biological report included in **Appendix C2** of this document. The focused plant surveys shall be conducted in accordance with standardized guidelines issued by the regulatory agencies and by CNPS. The surveys shall be conducted in the field at appropriate times of the year to coincide with the growing season and different blooming periods and when optimum conditions for identification (generally blooms, fruits, and leaves) are present. Biologists shall pay special attention to those habitat areas that appear to provide suitable habitat for special-status species. Every plant taxon that occurs on site shall be identified to the taxonomic level necessary to determine rarity and listing status, as feasible. Plant species shall be identified using plant field and taxonomical guides. All special-status plant species shall be identified, recorded in field notes, counted or estimated, and mapped on an aerial map or with a GPS unit. Following completion of the focused botanical surveys, the biologist shall prepare a focused botanical survey report in accordance with agency guidelines. The report shall: 1) summarize information regarding the habitat of the survey area and the habitat's suitability for special-status plants; 2) assess the potential presence of special-status plants onsite; 3) analyze the potential impacts on special-status plants from project development; and 4) recommend, as appropriate, BMPs, avoidance and protection measures, and	VVTA Qualified Biologist	Field Verification	1. VVTA 2. VVTA 3. Prior to Construction

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	mitigation measures to reduce or avoid potential impacts on special-status plants. The report shall include: 1) methods and results of the literature review and field surveys; 2) figures depicting the location of special-status plants; 3) a complete flora compendium; and 4) site photographs.			
	MM BIO-9: Protocol Trapping Surveys for the Mohave ground squirrel (Hesperia Transfer Hub Site) Prior to construction commencement: protocol trapping surveys for the Mohave ground squirrel shall be conducted in accordance with the *Mohave Ground Squirrel Survey Guidelines* (CDFW, 2023) by a biologist with a Memorandum of Understanding (MOU) from the CDFW to determine the presence or absence of this species. A project-specific report shall be prepared and submitted to the appropriate CDFW regional office contact to support the environmental review process for the project. A current CDFW Mohave ground squirrel survey form spreadsheet must be included with project-specific reports. If Mohave ground squirrels are determined to be present in the BSA, consultation with the CDFW shall occur. Avoidance measures may include the restriction of construction activities for each phase of the project as necessary to avoid disturbance to the known burrows or establishment of exclusion zones (no ingress of personnel or equipment), installation of exclusionary fencing of the area where the species are found and posting of signs to publicize the sensitive nature of the area.	VVTA Qualified Biologist	Field Verification	1. VVTA 2. VVTA 3. Prior to Construction
Threshold 4.4 d): Would the project interfere substantially with the movement of any native resident or	**MMs BIO-1** through **BIO-7** above.	VVTA Qualified Biologist	Field Verification	1. VVTA 2. VVTA

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				3. Prior to and during Construction
Threshold 4.4 e): Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	**MM BIO-10: Native Desert Vegetation Survey and Protected Plant Preservation Plan** The City of Hesperia's Municipal Code (Chapter 16.24) requires preservation of Joshua trees given their importance in the desert community. A Protected Plant Preservation Plan (which is required by City Municipal Code) shall be prepared and submitted to the City for review and approval. A native desert vegetation survey must be conducted to produce findings that will guide the formation of this plan. The survey objective is to evaluate the health and general condition of the western Joshua trees and creosote bush present on the project site. A project-specific plan will provide further guidance regarding the transplant and/or preservation of the western Joshua trees and protection for creosote rings "10 feet or greater in diameter" as per § 16.24.150 of City Municipal Code. Transplant suitability of the western Joshua trees will be determined by the results of the survey. This survey shall be conducted by a qualified arborist. The plan shall incorporate survey data, identify and outline preconstruction survey methods for the native desert vegetation on the project site, describe preconstruction and construction-phase biological monitoring and transplant methods that are applicable, or outline any identified CDFW permit and Memorandum of Understanding requirements for active relocation, if either is necessary. The Plan shall include details of protective actions regarding the western Joshua trees on the project site.	VVTA Qualified Biologist	Field Verification	1VVTA 2. VVTA 3. Prior to and during Construction

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	A qualified City-approved biologist or arborist with the concurrence of VVTA shall be retained to conduct any relocation/transplanting activities and should follow the protocol of the city's Municipal Code and Protected Native Vegetation Plan provided by the city's Planning Division. The Protected Plant Preservation Plan shall include details regarding criteria and requirements when conducting transplanting activities such as the following: The Joshua trees shall be retained in place or replanted somewhere on the site where they can remain in perpetuity or shall be transplanted to an off-site area approved by the City where they can remain in perpetuity. Joshua trees identified as not suitable for transplanting shall be cut up and discarded according to City requirements. One week prior to excavation, earthen berms shall be created around each tree by the biologist and the trees shall be watered during the week prior to transplanting. Watering the trees prior to excavation will help make excavation easier, ensure the root ball will hold together, and minimize stress to the tree. Prior to moving, holes to accept the trees shall be excavated at the pre-selected location. Trees shall be placed and oriented in the same direction as their original direction. The holes shall be backfilled with native soil, and the transplanted tree shall be immediately watered. All trees must be tagged on their north-facing side prior to moving to ensure they will be placed in the same direction. The Protected Plant Preservation Plan shall include a watering schedule to ensure the survival of the transplanted trees. The watering program shall be based upon the needs of the trees and the local precipitation.			
4.5 Cultural Resources				
Threshold 4.5 b): Would the project cause a substantial adverse change in the significance of an	**MM CUL 1** If archaeological resources are discovered during construction activities, the contractor will halt construction activities in the immediate area and notify VVTA. VVTA shall retain an archaeologist who meets the Secretary of the	Qualified Archaeologist Construction Contractor	Field Verification	1. VVTA 2. VVTA

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
archaeological resource pursuant to § 15064.5.	Interior's Professional Qualifications Standards for Archaeology who will be notified and afforded the necessary time to recover, analyze, and curate the find(s). The qualified archaeologist will recommend the extent of archaeological monitoring necessary to ensure the protection of any other resources that may be in the area. Any identified cultural resources shall be recorded on the appropriate DPR 523 (A-L) form and filed with the South Central Coastal Information Center. Construction activities may continue on other parts of the project site while evaluation and treatment of prehistoric archaeological resources takes place.			3. During construction activities
Threshold 4.5 c): Would the project disturb any human remains, including those interred outside of formal cemeteries.	**MM CUL 2** If human remains are encountered during excavations associated with this project, all work will stop within a 30-foot radius of the discovery and the San Bernardino County Coroner will be notified (§ 5097.98 of the Public Resources Code). The Coroner will determine whether the remains are recent human origin or older Native American ancestry. If the coroner, with the aid of the supervising archaeologist, determines that the remains are prehistoric, they will contact the NAHC. The NAHC will be responsible for designating the Most Likely Descendant (MLD). The MLD (either an individual or sometimes a committee) will be responsible for the ultimate disposition of the remains, as required by § 7050.5 of the California Health and Safety Code. The MLD will make recommendations within 24 hours of their notification by the NAHC. These recommendations may include scientific removal and nondestructive analysis of human remains and items associated with Native American burials (§ 7050.5 of the Health and Safety Code).	Construction Contractor San Bernardino County Coroner	Field Verification	1. VVTA 2. VVTA 3. During project construction activities
4.7 Geology and Soils				
Threshold 4.7 f): Would the project directly or indirectly destroy a	**MM GEO-1** Prior to the issuance of a grading permit, VVTA shall retain the services of a qualified paleontologist for the project. During construction, should	VVTA Qualified Paleontologist	Monitoring, Assessment, Recovery, and Curation	1. VVTA 2. VVTA

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
unique paleontological resource or site or unique geologic feature?	paleontological resources be encountered, the paleontologist shall develop, as needed, a Paleontological Resources Impact Mitigation Plan (PRIMP) to mitigate the potential impacts to unknown buried paleontological resources that may exist onsite for the review and approval by the appropriate authority. The PRIMP shall require that the paleontologist perform paleontological monitoring of any ground disturbing activities within undisturbed native sediments during mass grading, site preparation, and underground utility installation. The project paleontologist may reevaluate the necessity for paleontological monitoring after 50 percent or greater of the excavations have been completed. In the event paleontological resources are encountered, ground-disturbing activity within 50 feet of the area of the discovery shall cease. The paleontologist shall examine the materials encountered, assess the nature and extent of the find, and recommend a course of action to further investigate and protect or recover and salvage those resources that have been encountered. Criteria for discarding specific fossil specimens will be made explicit. If the qualified paleontologist determines that impacts to a sample containing significant paleontological resources cannot be avoided by project planning, then recovery may be applied. Actions may include recovering a sample of fossiliferous material prior to construction, monitoring work and halting construction if a significant fossil needs to be recovered, and/or cleaning, identifying, and cataloging specimens for curation and research purposes. Recovery, salvage and treatment shall be done at VVTA's expense. All recovered and salvaged resources shall be prepared to the point of identification and permanent preservation by the paleontologist. Resources shall be identified and curated into an established accredited professional repository. The paleontologist shall have a repository agreement in hand prior to initiating recovery of the resource.	Construction Contractor		3. Prior to the issuance of grading permit; During project construction activities
4.18 Tribal Cultural Resources				

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
Threshold 4.18 b): Would the project cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources or in a local register of historical resources as defined in Public Resources Code § 5020.1(k)?	**MM TCR-1:** [To Be Determined.] Mitigation measure TCR 1 is yet to be determined. This text will be updated once the AB52 consultation has concluded between VVTA and the Tribes.	TBD	TBD	TBD
	MM TCR-2 - Tribal Cultural Resources and Archaeological Monitoring: The project archaeologist, in consultation with interested tribes, the developer, and VVTA, shall develop an Archaeological Monitoring Plan (AMP) to address the details, timing, and responsibility of archaeological and cultural activities that will occur on the project site. Details in the AMP shall include: • Monitoring of project-related ground disturbance (including, but not limited to, brush clearing, grading, trenching, etc.) coordinated with these construction-related activities; • The development of a simultaneous monitoring schedule in coordination with the developer and the project archeologist for the designated Native American Tribal Monitors from the two consulting tribes during grading, excavation and ground disturbing activities on the site: including the scheduling, safety requirements, duties, scope of work, and Native American Tribal Monitors' authority to stop and redirect grading activities in coordination with the project archaeologist.; • The protocols and stipulations that the developer, VVTA, Tribes, and project archaeologist will follow in the event of inadvertent TCR discoveries, including any newly discovered cultural resource deposits that shall be subject to a cultural resources evaluation. At least 30 days prior to application for a grading permit and before any brush clearance, grading, excavation, and/or ground disturbing activities on the site, the developer shall retain a tribal cultural monitor(s) to monitor all ground-disturbing activities in an effort to identify any unknown TCRs.	VVTA Construction Contractor Qualified Archaeologist Tribal Monitor	Field Verification	1. VVTA 2VVTA 3. During construction activities

TOPICAL AREA IMPACT	MITIGATION MEASURE	RESPONSIBLE PARTY	MONITORING ACTION	1. ENFORCEMENT AGENCY 2. MONITORING AGENCY 3. MONITORING PHASE
	Pursuant to the AMP, a tribal monitor from the consulting tribe(s) shall be present during the initial grading activities. The tribal monitor(s) shall be present during all ground disturbing work, not only if something is found during initial grubbing.			
	MM TCR-3: Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. If funerary objects are discovered during grading or archeological excavations, they shall be treated in the same manner as bone fragments that remain intact, and the construction contractor and/or qualified archeologist shall consult with the Xxxxxx tribe.	Construction Contractor Qualified Archaeologist	Field Verification	1. VVTA 2VVTA 3. During construction activities
	MM TCR-4: As specified by California Health and Safety Code § 7050.5, if human remains are found on the project site during construction or during archaeological work, the San Bernardino County Coroner's office shall be immediately notified and no further excavation or disturbance of the discovery or any nearby area reasonably suspected to overlie adjacent remains shall occur until the Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code § 5097.98. The Coroner would determine within two working days of being notified, if the remains are subject to his or her authority. If the Coroner recognizes the remains to be Native American, he or she shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC would make a determination as to the Most Likely Descendent.	Project Contractor San Bernadino County Coroner Native American Heritage Commission	Field Verification	1VVTA 2. VVTA 3. During construction activities