
ENVIRONMENTAL CHECKLIST FORM

- 1. Name of Proponent:** VWP-OP Shinohara Owner, LLC
- 2. Lead Agency Name and Address:** City of Chula Vista
Development Services Department
Oscar Romero, Project Planner
276 Fourth Avenue
Chula Vista, CA 91910
(619) 691-5098
oromero@chulavistaca.gov
- 3. Addresses and Phone Number of Proponent:** Steven Schwarz
VWP-OP Shinohara Owner, LLC
2390 E. Camelback Rd. Ste. 305
Phoenix, AZ 85016
(602) 427-6972
sschwarz@viawestgroup.com
- 4. Name of Proposal:** Shinohara Business Center
- 5. Public Review Period:** Begins on August 22, 2022, & ends at
5:00 pm on September 22, 2022
- 6. Case No.** IS21-0006
- 7. Project Location:**

The project is located at 517 Shinohara Lane, westerly of Brandywine Avenue, northerly of Main Street, at the end of the cul-de-sac on Shinohara Lane, in the City of Chula Vista, California, as shown in Figures 11 & 12 – USGS Map & Aerial Project Site. The project site is identified on the Imperial Beach, California USGS 7.5-minute quadrangle within Township 18 South, Range 1 West, Sections 18 and 19. It comprises Tax Assessor parcel number – APN 644-040-01.

8. General Plan Designation – IL – Limited Industrial – (0.25 – 0.5 FAR)

The City's General Plan states, "The Limited Industrial designation is intended for light manufacturing; warehousing; certain public utilities; auto repair; auto salvage yards; and flexible-use projects that combine these uses with associated office space."

9. Zoning Designation – I-L-P – Limited Industrial Precise Plan

Per Title 19 of the Municipal Code – Planning and Zoning, "The purpose of the I-L zone is to encourage sound limited industrial development by providing and protecting an environment free from nuisances created by some industrial uses and to ensure the purity of the total environment of Chula Vista and San Diego County and to protect nearby residential, commercial and industrial uses from any hazards or nuisances."

10. Description of the Site and Project:

Environmental Setting

The project area is located within San Diego County within the Peninsular Ranges Geomorphic Province. The Peninsular Ranges make up the majority of San Diego County and contain a series of mountain ranges separated by northwest-trending valleys (California Department of Conservation, California Geological Survey, 2002). The project area is located within the Otay River Valley along the north bank of the Otay River.

Modern climate conditions within the project area consist of a Mediterranean climate, with an average rainfall of nine to ten inches per year, generally from January through March. The project area is currently undeveloped. Vegetation consists of disturbed Diegan coastal sage scrub, non-native grassland, disturbed habitat, and eucalyptus trees (page 3, Biology Letter Report for 517 Shinohara Lane, Appendix D).

Elevations on the site range from 150 to 255 feet above mean sea level (amsl). The project area appears to have been graded in 1993 based on aerial imagery. The parcel has a southerly aspect and slopes to the south with a moderate descent in elevation from the project area's northern boundary. The upper half of the project area has been graded to form a pad (most likely in 1993). However, it appears to have lain fallow and undisturbed since the pad formation (page iii, Archaeological Resources Survey Report for the Shinohara Industrial Project, Appendix E).

The following uses bound the site.

- Jabil Packaging Solutions (Plastic Injection Molding) and Crash Champions Collision Repair on the south
- TransAmerican Manufacturing Group (Autoparts), Transpere (Information Technology Asset Solutions), Curbell Plastics, Inc. (Plastic Wholesaler), and Técnico Corporation Marine & Industrial Contractors (Shipbuilding and Repair Company) on the east
- Multi-family residential – Mendocino Condominiums to the north
- Single-family residential to the west

Drainage

Topographically, the site slopes to the south from the northern property boundary, forming three (3) drainage basins with three (3) discharge locations.

Existing Drainage Basin A comprises the western portion of the site. Runoff drains via overland flow to an existing concrete swale located at the southern property boundary. The drainage swale carries flow east to an existing Type F catch basin at the southern property boundary. The catch basin connects to an existing private storm drain pipe that outlets via the curb outlet onto Main Street.

Existing Drainage Basin B comprises the eastern portion of the site. Runoff is conveyed via overland surface flow to an existing concrete drainage channel located at the southeastern corner of the site. The drainage channel conveys runoff south and outlets via curb outlet onto Main Street.

Flow travels west via concrete curb and gutter from Main Street to an existing curb inlet. Stormwater is then conveyed south through an existing storm drain pipe and outlets over the

headwall into the Otay River. The Otay River travels west and outlets at the San Diego Bay and, ultimately, the Pacific Ocean.

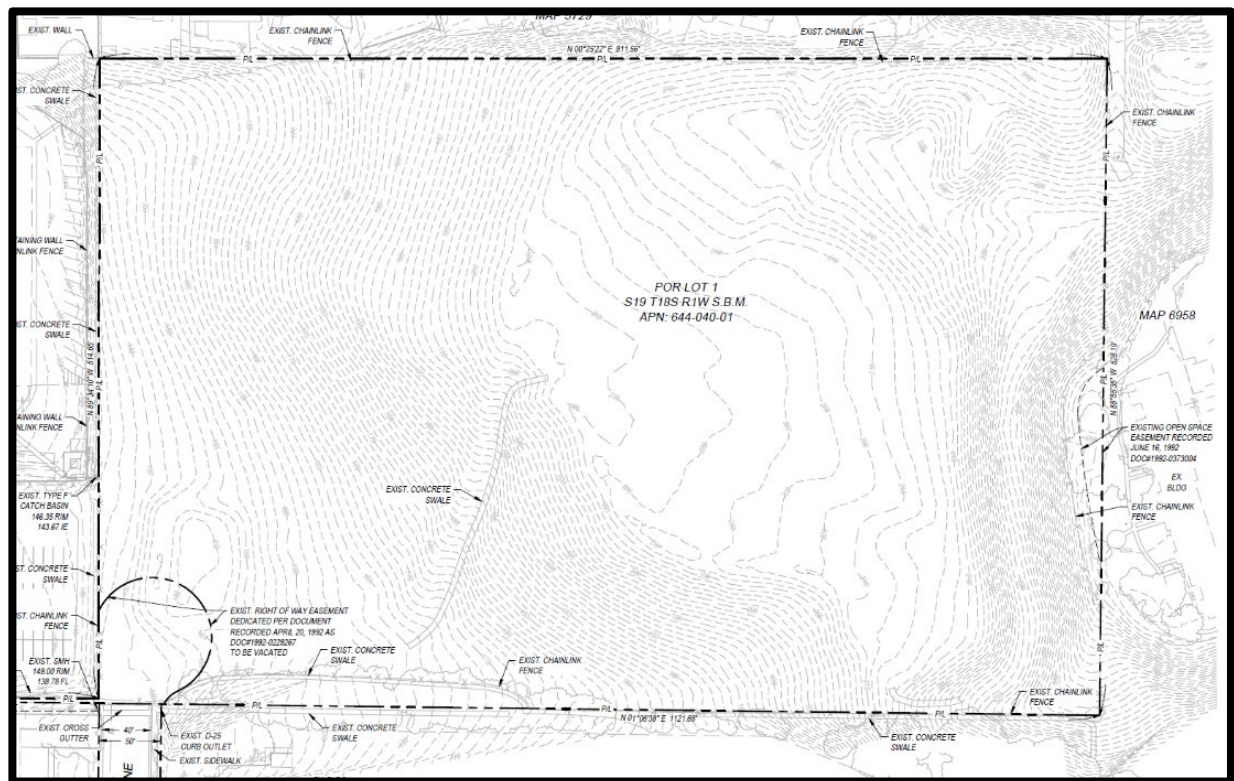
Existing Drainage Basin C comprises the northwesterly portion of the site. Runoff is conveyed via overland surface flow to an existing swale west of the project site. Local surface runoff from the project site and surrounding properties collects in this area and flows to the south to an existing concrete drainage channel located in the rear yard of an existing single-family residence at the end of Tanoak Court. The existing concrete channel flows to the south and then turns and flows to the west and discharges into Tanoak Court through two Type-A curb outlets (Preliminary Drainage Study Appendix K).



Figure 1 - Tanoak Court Type A Curb Outlets

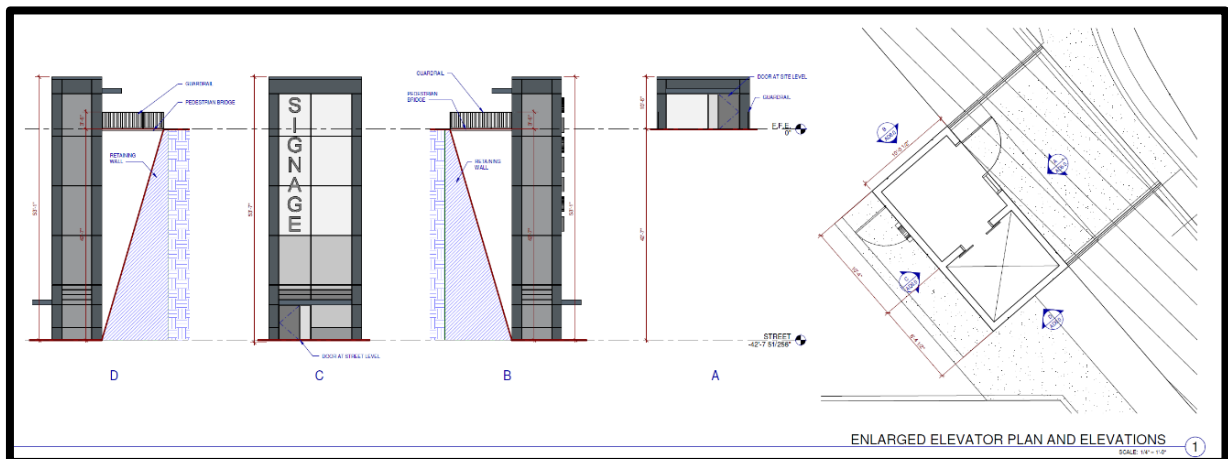
Project Description

The project is the development of the vacant parcel totaling 9.72 gross acres (APN 644-040-01) and the vacation of the right-of-way easement (document #1992-0228267 recorded April 20, 1992), the proposed cul-de-sac bulb of Shinohara Lane that has not yet been built. The cul-de-sac bulb will be replaced with a modified hammerhead vehicular access easement. Shinohara Lane provides access to the site. An incumbrance impacts the site, an existing open space easement recorded in June of 1992 in favor of the property to the north. The project has been designed around this easement.



Grading Design

Due to the grade differences between the property and surrounding properties, retaining walls are planned on the site's north, south, east, and west sides, with an elevator proposed at the end of Shinohara Lane to get the pedestrian up to the building pad area. Behind the elevator will be a plantable Verdura retaining wall varying in exposed retaining wall heights from 0 feet up to 50 feet, wrapping around the eastern driveway and then along the southerly boundary of the parking area.



A soil nail wall (retaining wall) wraps around the eastern property line to the northern parking lot boundary with varying exposed retaining wall heights from 0 feet to 50 feet.

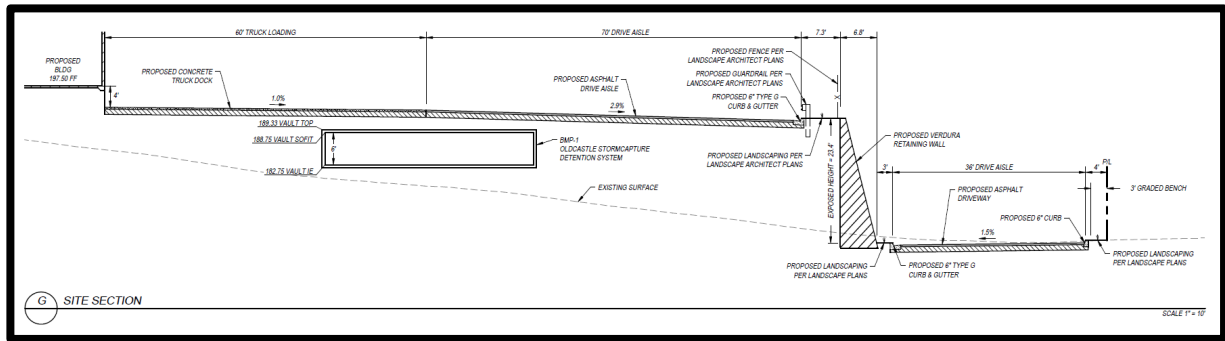


Figure 4 – Eastern Property Line

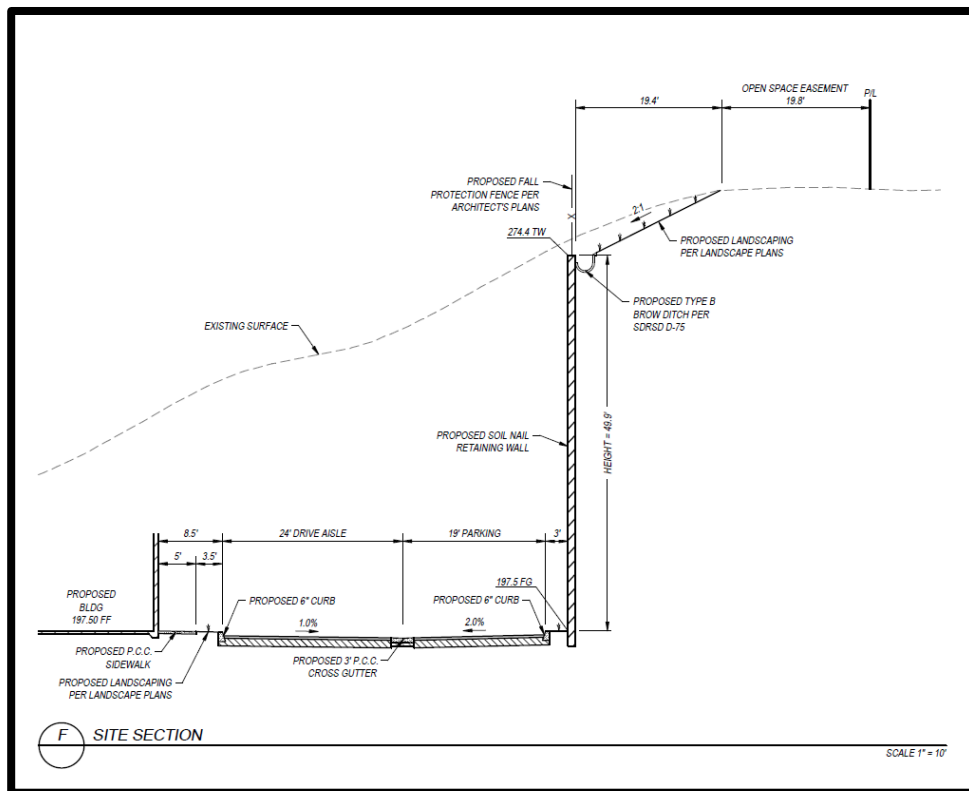


Figure 5 – Northern Property Line

Verdura and soil nail retaining walls will be along the western boundary of varying exposed retaining wall heights from 0 feet to 31 feet (See Appendix A Sheets L1.1 and L2.1 and Appendix B Sheet C6.0).

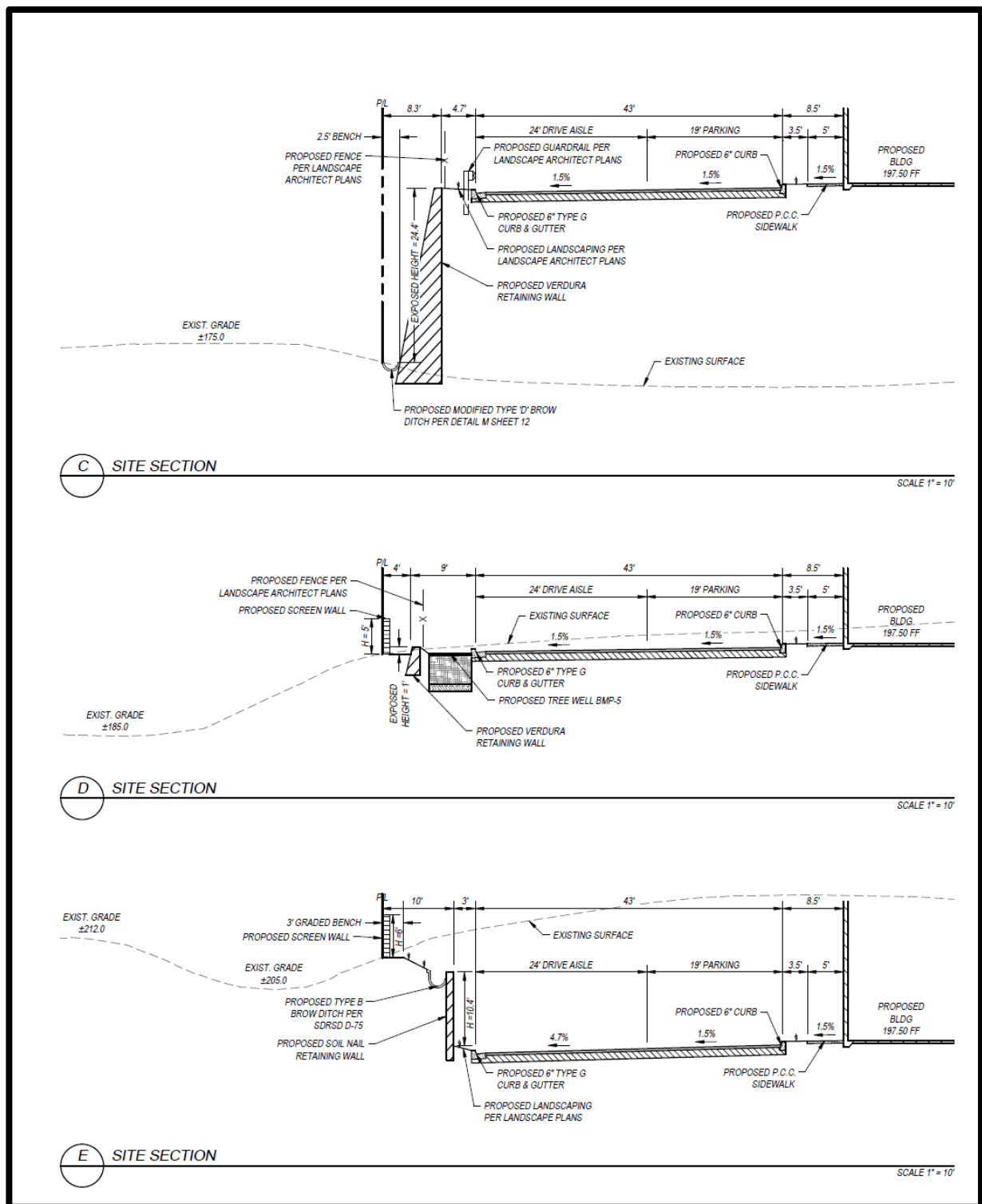


Figure 6 - Western Property Line

A mechanically stabilized earth (MSE) retaining wall is proposed along the project's southerly property line. The base of the proposed wall will be embedded in the native soil, which serves as the wall's foundation. Since the proposed wall is adjacent to the existing property line, the wall's embedment below the existing ground could be accomplished through two options. Option 1 would proceed with temporary shoring to allow soil excavation along the property line, construct the

foundation, and then the wall and immediately adjacent soils would be brought up to grade. The wall construction would be continued up to the final elevation instead of temporary shoring.

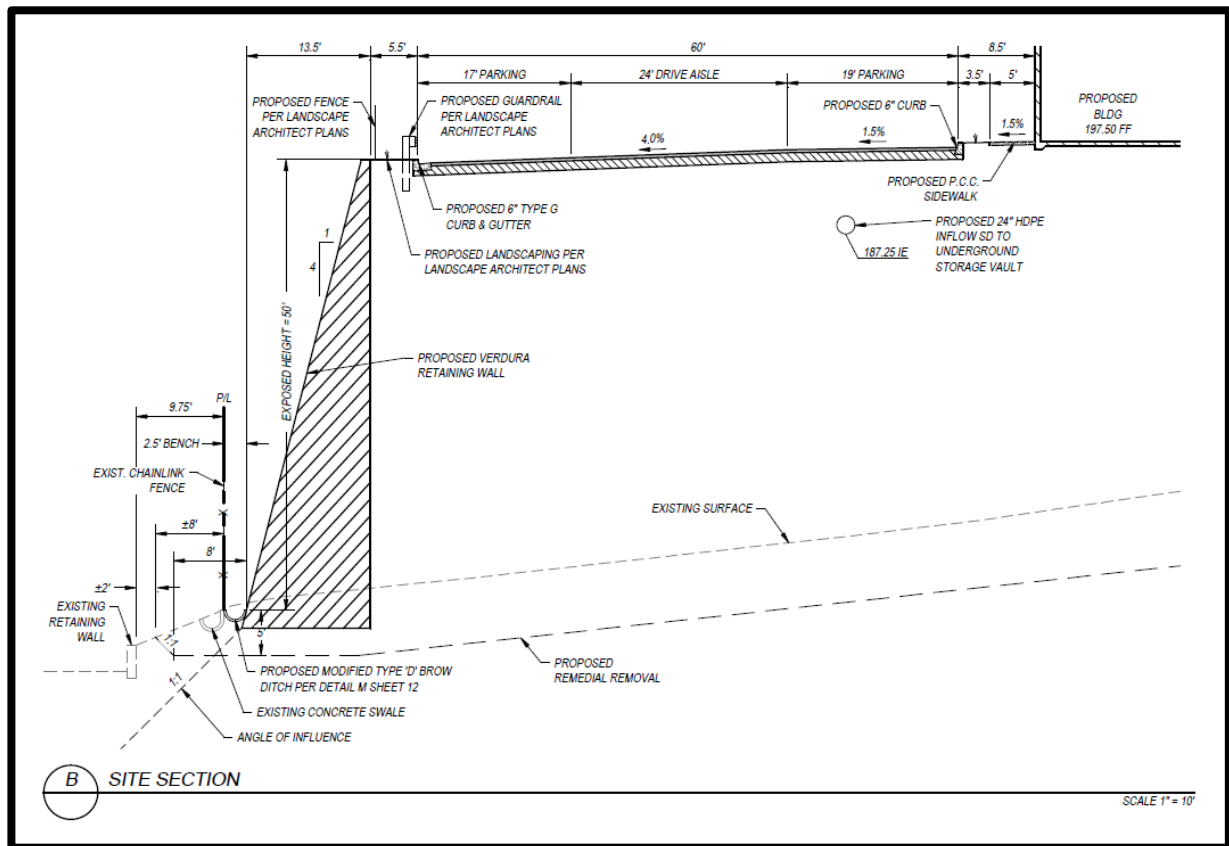


Figure 7 - Southern Property Line

Option 2 would entail obtaining authorization from the property owners of 505 Main Street (644-040-24-00) and 515 Main Street (644-040-23-00), so 04 acres of off-site grading of disturbed land along the southerly boundary can be proposed. Grading off-site along the southerly property line on the two adjacent properties to the south would allow the same excavation for the wall's foundation construction to occur. The excavation for the wall's footing could be made without shoring with the additional room and eliminate the need for the temporary shoring along the southerly property line. Once the wall's foundation is constructed, the adjacent soil will be backfilled and properly compacted, and the proposed retaining wall will be constructed to its ultimate elevation.

Site Design

Development of the site will include a single, one-story building with a total footprint of 173,432 square feet (Figure 14 – Site Plan).

The building includes:

Building Size	
Use Type	Square-Feet
Warehouse	168,926
Office	4,506
Building Footprint	173,432
Mezzanine/Office	4,724
Total	178,156

The project requires discretionary approval for the Design Review – DR21-0032. Hours of operation are proposed as twenty-four hours a day, seven days a week.

Warehouse distribution uses are proposed to serve the local and subregional San Diego County area. Approximately 350 new jobs for the community, including management, warehousing, and driver positions, are proposed. Up to three shifts are planned with up to 200 employees per shift.

Deliveries will be through semi-trailer trucks, utilizing the 25 truck docks. The loading docks will serve distribution components through vans and small box trucks. The building will not be used for cold storage or refrigerated warehousing; therefore, Transport Refrigeration Unit (TRUs) trucks will not be expected at the site.

While the proposed project is for a speculative warehouse-type user, this environmental analysis assumes a worst-case scenario of a distribution facility. The difference between warehouses and distribution facilities is that a warehouse is primarily devoted to the storage of materials with local and regional trips. In comparison, distribution facilities can be used for storage and numerous fulfillment and distribution services, such as product mixing and packaging. In addition, a warehouse generally generates five trips per 1,000 square feet of warehouse space. In contrast, a very busy distribution facility can generate up to 25 trips per 1,000 square feet of distribution facility space. Distribution facilities can also have a greater mixture of trips with large trucks traveling great distances and a smaller fleet mix of vehicles making more local trips.

The analysis is based on the project's Local Mobility Analysis (Appendix O), where an equal level of detail analysis was conducted for both a warehouse building and a distribution facility. The warehousing building is calculated to generate 1,088 daily trips with 143 AM peak hour trips (104 inbound/39 outbound) and 160 PM peak hour trips (60 inbound/100 outbound). The distribution facility is calculated to generate 4,881 daily trips with 328 AM peak hour trips (125 inbound/203 outbound) and 619 PM peak hour trips (434 inbound/185 outbound). Therefore, this analysis assumes the worst-case scenario preparing for the possibility of a distribution use in the future, and bases all possible analyses on the distribution facility.

Design Review – DR21-0032 – Appendix A

The warehouse building is of a contemporary single-story concrete tilt-up industrial building design. The color palette uses white, light gray, and dark gray, with charcoal and blue accent colors. Elevation changes, pop-outs, and scoring are used to break up the massing of the building. At the entrances, storefront doors are provided with sectional windows and a shade canopy painted blue. The maximum height of the building is 43 feet.

Conceptual landscape plans have been provided as part of the design review for the project. Enhanced paving at the building entries is provided. Parking lot shading has been calculated based upon the growth of the trees at five years. An approximate 51-foot-tall pedestrian elevator is proposed off Shinohara Lane to get pedestrians from Shinohara Lane to the building, given the steep grade of the property.

Construction Characteristics

The applicant proposes to commence grading in Fall 2022. The project is envisioned to take approximately 24 months to complete. The grading will generally include 133,000 cubic yards of cut to a maximum depth of 52 feet, 132,000 cubic yards of fill to a maximum depth of 48 feet with anticipated spoils of 4,000 cubic yards, with 5,000 cubic yards of export in approximately 360 truck trips. Proposed cuts and fills are estimated to be up to 52 feet and 48 feet, respectively, with proposed new slopes up to approximately 18 feet in height.

The following project grading considerations are also being proposed.

- The contractors, during all construction phases, shall ensure:
 - Construction will only occur during the permissible hours of 7:00 a.m. to 10:00 p.m. Monday through Friday and 8:00 a.m. and 10:00 p.m. on Saturdays and Sundays. No construction is permitted on Federal, state, or City holidays, per Municipal Code Section 17.24.040(C)(8).
 - All construction equipment is equipped with the appropriate noise attenuating devices, such as mufflers, silencers, and other original equipment.
 - The equipment staging areas create the greatest distance between the construction-related noise/vibration sources and the residential (sensitive receptors) nearest the project site during construction phases.
 - That idling equipment will be turned off when not in use.
 - That equipment shall be maintained so that vehicles and their loads are secured from rattling and banging.

Construction Phasing	
Phase Name	Length of Phase (days)
Grading	20
Building Construction	230
Paving	20
Architectural Coating	20
Total	290

Construction Equipment				
Type of Equipment	Phase			
	Grading	Building Construction	Paving	Architectural Coating
Grader	1			
Excavator	1			
Rubber Tired Dozer	1			
Tractor/Backhoe/Loader	1	1		
Cranes		1		
Forklift/Tractor		3		
Generator		1		
Welder		1		
Pavers			2	
Rollers			2	

Type of Equipment	Construction Equipment			
	Grading	Building Construction	Paving	Architectural Coating
Paving Equipment			2	
Air Compressors				1

Off-Site Improvements

Fire Flow Line

Off-site trenching activities will occur in Main Street for the new fire service and on the adjacent property at 515 Main Street (644-040-23-00) to bring the proposed private fire service to the project site with the property owner's authorization. Alternatively, a separate public water main extension may be constructed from the existing water main in Main Street, north up Brandywine Avenue, and then west to the project site in Shinohara Lane.

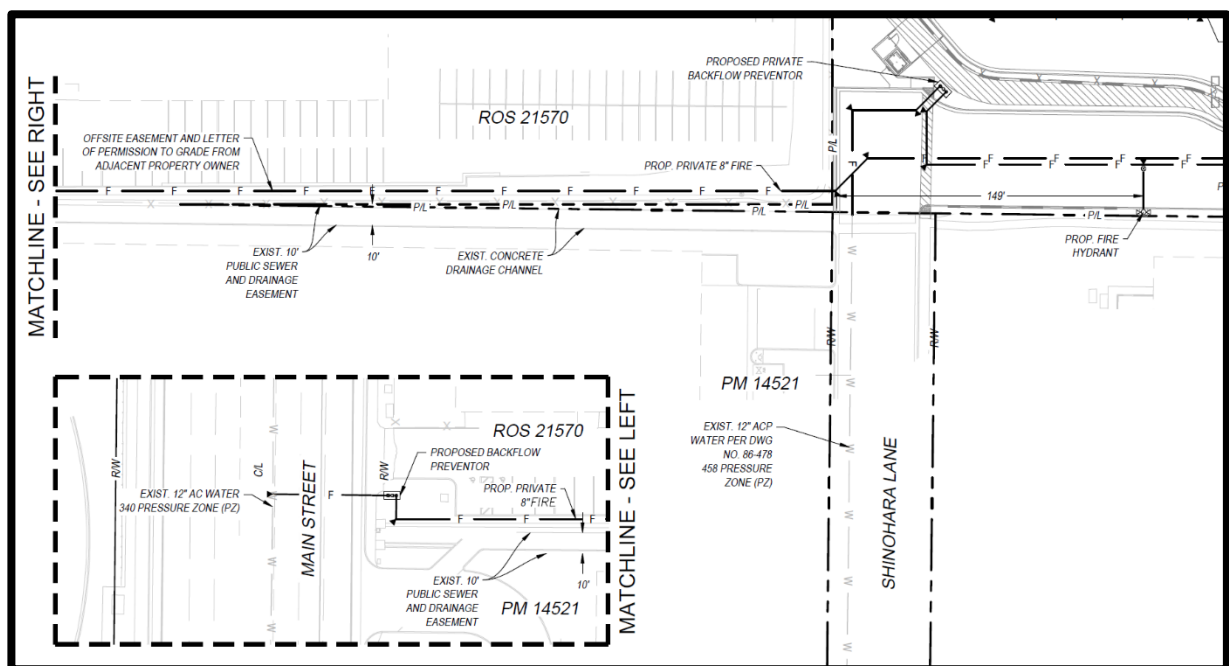


Figure 8 - Fire Service

In addition, an existing drainage structure will be modified on an adjacent property at 505 Main Street (644-040-24-00) if authorization is granted.

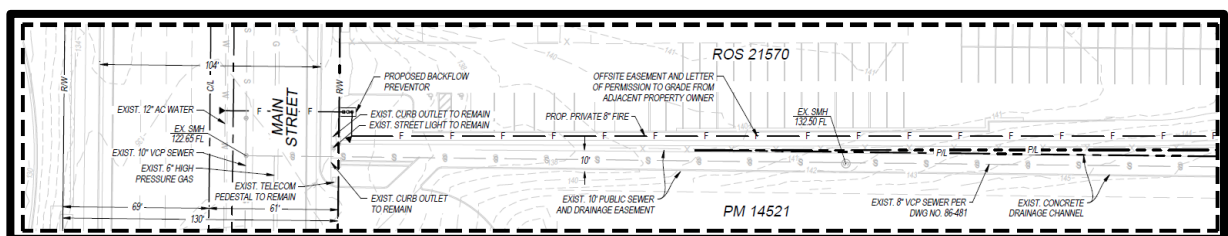


Figure 9 - Storm Drain and Other Utilities

In Shinohara Lane, water and sewer connections to existing public facilities will also occur.

Traffic Improvements

Two land-use scenarios were analyzed, a warehousing building option and a distribution facility option. Both scenarios need off-site traffic improvements. These off-site improvements have been analyzed in this environmental review.

Warehouse Building

At Main Street/Brandywine Avenue, the project would need to restripe the southbound approach to replace the exclusive southbound thru lane with a shared thru-right lane, improving the operation.

At Brandywine Avenue/Shinohara Lane, the eastbound approach would need to be restriped to provide dedicated left and right-turn lanes. Approximately 40 feet of curb-to-curb width is available on the west leg of Shinohara Lane. Therefore, it is possible to restripe the eastbound approach to provide dedicated left and right-turn lanes with the removal of on-street parking on the south side. A right-turn lane of approximately 100 feet in length is recommended, resulting in an on-street parking removal of 4 vehicles on Shinohara Lane.

Distribution Facility

At Main Street/Brandywine Avenue, the project would need to restripe the southbound approach to replace the exclusive southbound thru lane with a shared thru-right lane and add a second exclusive eastbound left-turn lane on Main Street.

At Brandywine Avenue/Shinohara Lane, the project needs to signal the intersection to provide adequate operations. The eastbound approach would need to be restriped with dedicated left and right-turn lanes with an overlap phase. The signal will allow a safer maneuver for outbound traffic entering Brandywine Avenue. Approximately 40 feet of curb-to-curb width is available on the west leg of Shinohara Lane. Therefore, it is possible to restripe the eastbound approach to provide dedicated left and right-turn lanes with the removal of on-street parking on the south side. A right-turn lane of approximately 100 feet in length is recommended, resulting in an on-street parking removal of 4 vehicles on Shinohara Lane.

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21080.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

Pursuant to AB 52 (Gatto, 2014), California Native American tribes traditionally and culturally affiliated with the project area can request notification of projects in their traditional cultural territory. No tribes have requested notification from the City of Chula Vista. Therefore AB 52 Tribal Consultation was not held on this project.

13. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):

- A. Regional Water Quality Control Board, San Diego – Region 9
- B. California Department of Fish and Wildlife
- C. Statewide Construction General Permit
- D. Otay Water District
- E. San Diego Gas and Electric
- F. AT&T
- G. Cox Communications
- H. San Diego County Air Pollution Control District

14. Appendices: (Found as Separate Documents and Incorporated by Reference into this IS/MND Pursuant to CEQA Guidelines Section 15150)

- A. Architectural & Landscape Drawings
- B. Civil Grading Plans
- C. Shinohara Industrial Center Project Air Quality, Greenhouse Gas, and Health Risk Impact Study City of Chula Vista, CA, prepared by MD Acoustics, LLC, May 17, 2022
- D. Biology Letter Report for 517 Shinohara Lane, City of Chula Vista, California, prepared by Dudek, July 6, 2022
- E. Archaeological Resources Survey Report for the Shinohara Industrial Project, 517 Shinohara Lane, Chula Vista, San Diego County, California, prepared by Red Tail Environmental, July 2021
- F. Shinohara Industrial Project – CEQA Energy Review, 517 Shinohara Lane, City of Chula Vista, CA, prepared by MD Acoustics LLC, May 17, 2022
- G. Geotechnical Investigation Shinohara Industrial Building 517 Shinohara Lane Industrial Building Chula Vista, California, prepared by Geocon Incorporated, July 28, 2021
- H. Paleontological Resources Inventory Report for the 517 Shinohara Lane Project, City of Chula Vista, San Diego County, California, prepared by Dudek, July 11, 2022
- I. Phase I Environmental Site Assessment Assessor's Parcel Number 644-040-01 517 Shinohara Lane, Chula Vista, CA 91911, prepared by SCS Engineers, July 13, 2021
- J. Soil Vapor Survey and Human Health Risk Screening Assessor's Parcel Number 644-040-01 517 Shinohara Lane, Chula Vista, CA 91911, prepared by SCS Engineers, August 5, 2021
- K. Preliminary Drainage Study for Project Shinohara OnPoint Development 517 Shinohara Lane Chula Vista, CA 91911, prepared by Pasco Laret Suiter & Associates, May 20, 2022
- L. Priority Development Project (PDP) Storm Water Quality Management Plan (SWQMP) Project Shinohara, OnPoint Development, 644-040-01, prepared by Pasco Laret Suiter & Associates, May 20, 2022
- M. Shinohara Industrial Center Project Noise Impact Study City of Chula Vista, CA, prepared by MD Acoustics, LLC, May 18, 2022
- N. City of Chula Vista Preliminary Sewer Study for Project Shinohara OnPoint Development DR21-0032 517 Shinohara Lane Chula Vista, CA 91911, prepared by Pasco Laret Suiter & Associates, February 14, 2022
- O. Local Mobility Analysis Chula Vista Shinohara Chula Vista, California, prepared by Linscott Law & Greenspan Engineers, July 19, 2022
- P. Shinohara Industrial Center Project – Evaluation of Changes to Air Quality, Greenhouse Gas, and Energy Impact, City of Chula Vista, CA, prepared by MD Acoustics LLC, March 23, 2022
- Q. Shinohara Industrial Center Project – Evaluation of Changes to Noise Impact Study, City of Chula Vista, CA, prepared by MD Acoustics LLC, March 23, 2022

15. Acronyms:

ADA -	American with Disabilities Act
ALUC -	Airport Land Use Commission
ALUCP -	Airport Land Use Compatibility Plan
AQMP -	Air Quality Management Plan
BMP -	Best Management Practice
CEQA -	California Environmental Quality Act
CIWMD -	California Integrated Waste Management District
CMP -	Congestion Management Plan
CUP -	Conditional Use Permit
CVFD -	Chula Vista Fire Department
CVPD -	Chula Vista Police Department
DOSH -	Division of Occupational Safety and Health Administration
DP -	Development Plan
DTSC -	Department of Toxic Substance Control
DWR -	Department of Water Resources
EIR -	Environmental Impact Report
EOP -	Emergency Operations Plan
FEMA -	Federal Emergency Management Agency
FMMP -	Farmland Mapping and Monitoring Program
GIS -	Geographic Information System
GHG -	Greenhouse Gas
GP -	General Plan
GPU -	General Plan Update
HCM -	Highway Capacity Manual
HCP -	Habitat Conservation Plan
IS -	Initial Study
LHMP -	Local Hazard Mitigation Plan
LID -	Low Impact Development
LOS -	Level of Service
LST -	Localized Significance Threshold
METRO -	City of San Diego's Metropolitan Wastewater Department
MM -	Mitigation Measure
MSCP -	Multiple Species Conservation Plan
NCCP -	Natural Communities Conservation Plan
NPDES -	National Pollutant Discharge Elimination System
OEM -	Office of Emergency Services
OSHA -	Occupational Health and Safety Administration
OPR -	Office of Planning & Research, State
PEIR -	Program Environmental Impact Report
PW -	Public Works
PWQMP -	Preliminary Water Quality Management Plan
RCP -	Regional Comprehensive Plan
RTIP -	Regional Transportation Improvement Plan
RTP -	Regional Transportation Plan
SANDAG -	San Diego Association of Governments
SCAG -	Southern California Association of Governments
SCAQMD -	South Coast Air Quality Management District
SCH -	State Clearinghouse
SDAPCD -	San Diego Air Pollution Control District

SDG&E -	San Diego Gas & Electric
SEIR -	Supplemental Environmental Impact Report
SWPPP -	Storm Water Pollution Prevention Plan
SWRCB -	State Water Resources Control Board
SWQMP -	Storm Water Quality Management Plan
UBC -	Uniform Building Code
USFWS -	United States Fish and Wildlife
USGS -	United States Geologic Survey
VMT -	Vehicle Miles Traveled

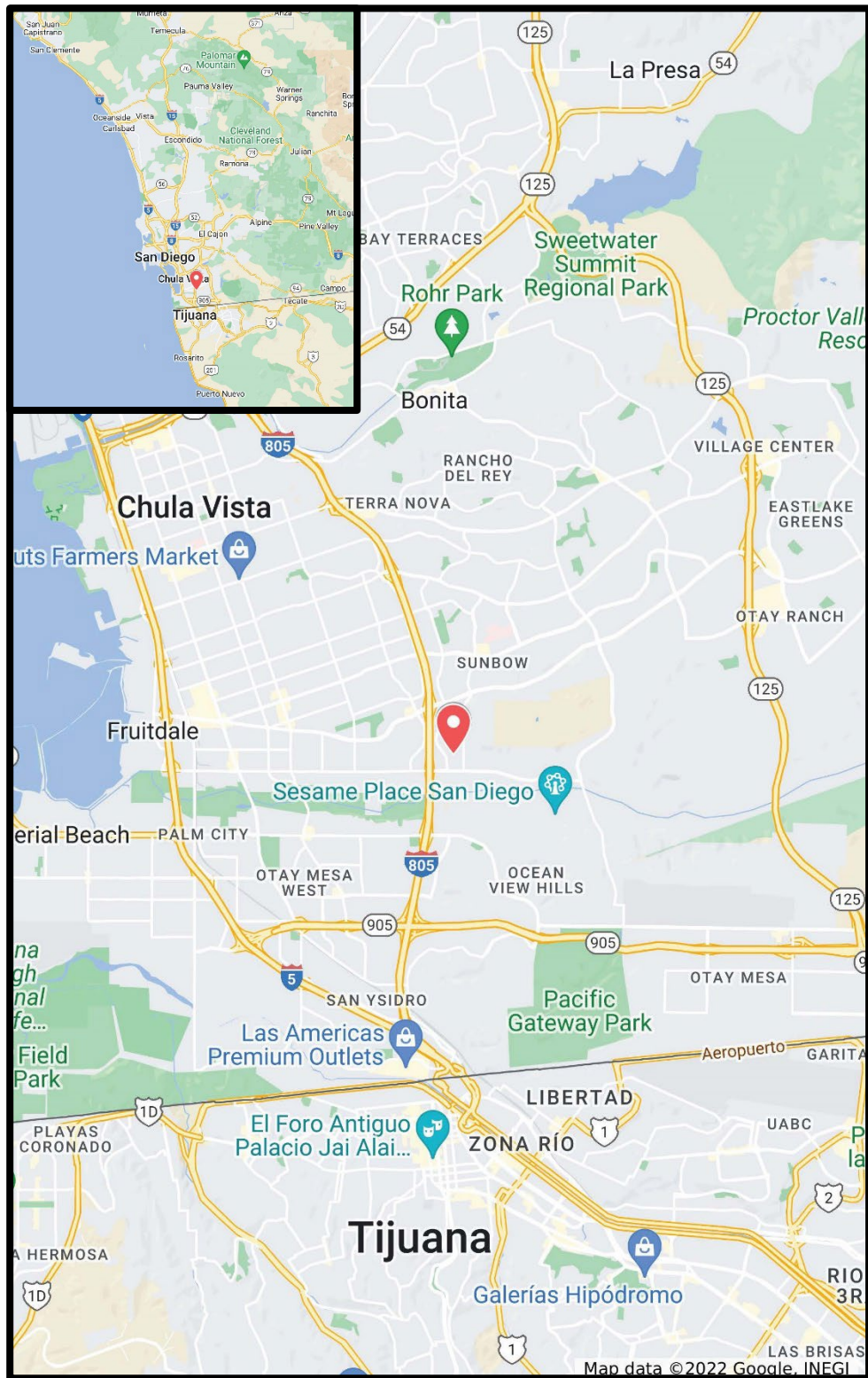


Figure 10 - Vicinity Map

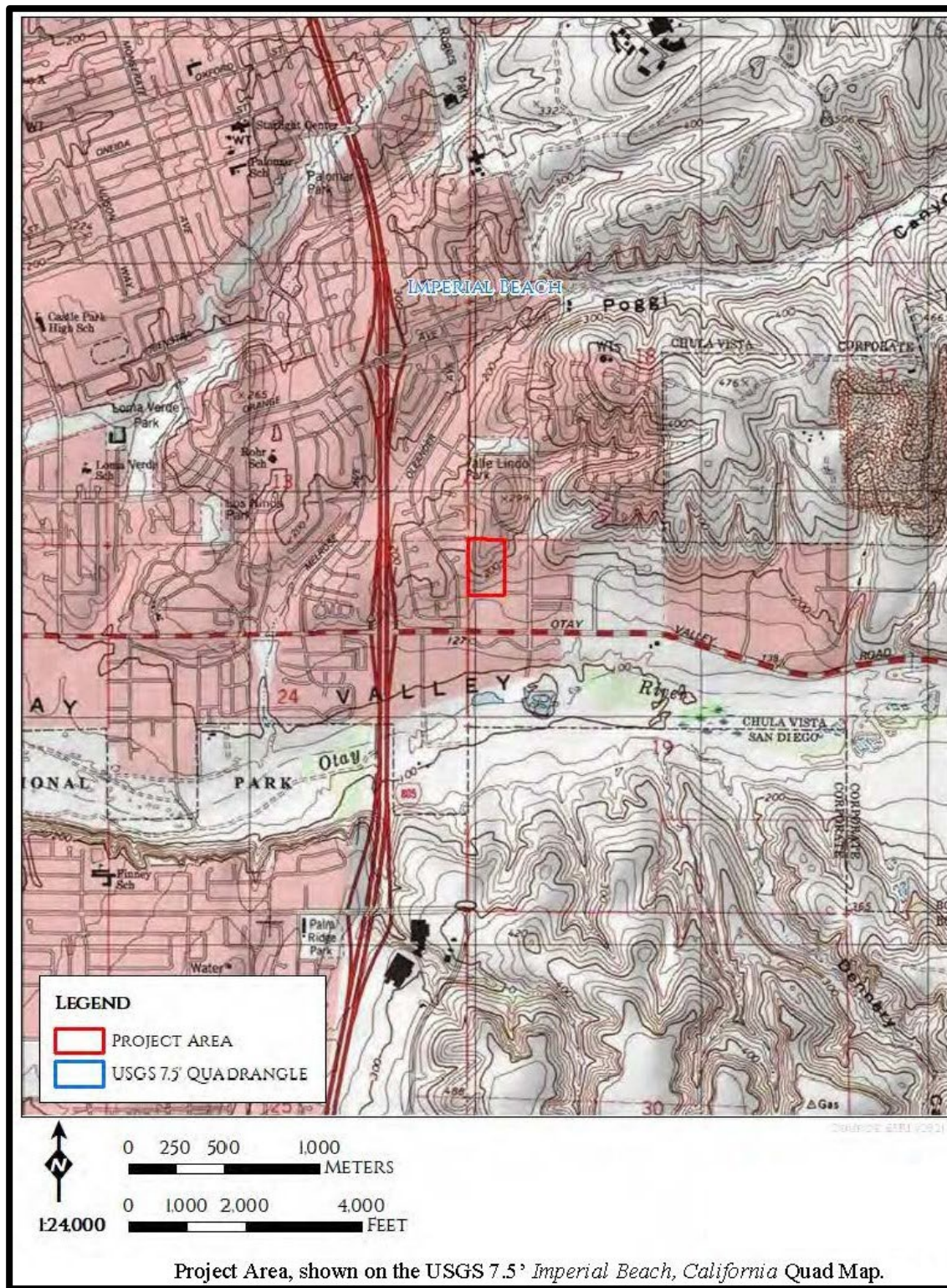


Figure 11 - USGS Map



Figure 12 - Aerial Project Site



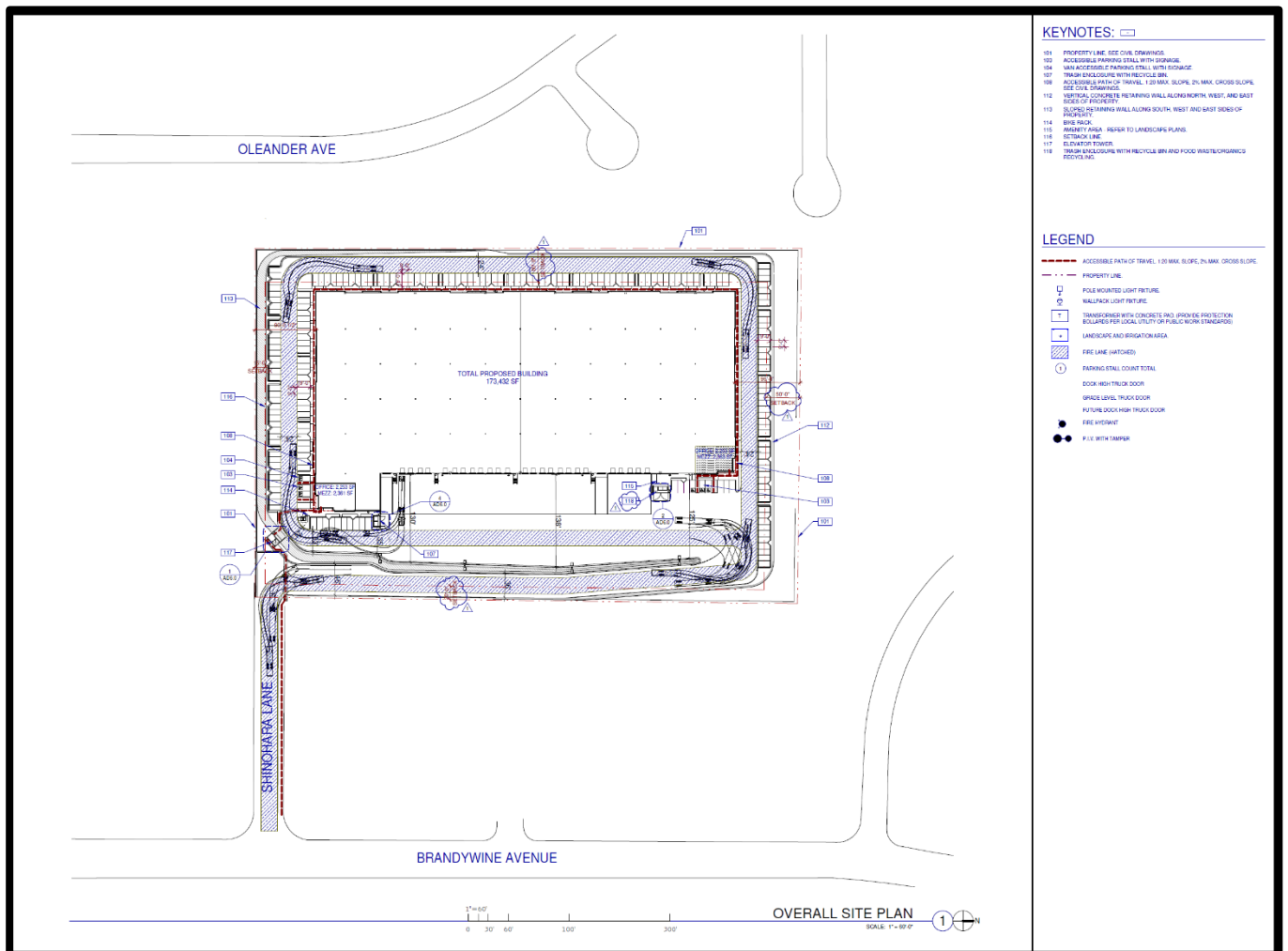


Figure 14 - Site Plan

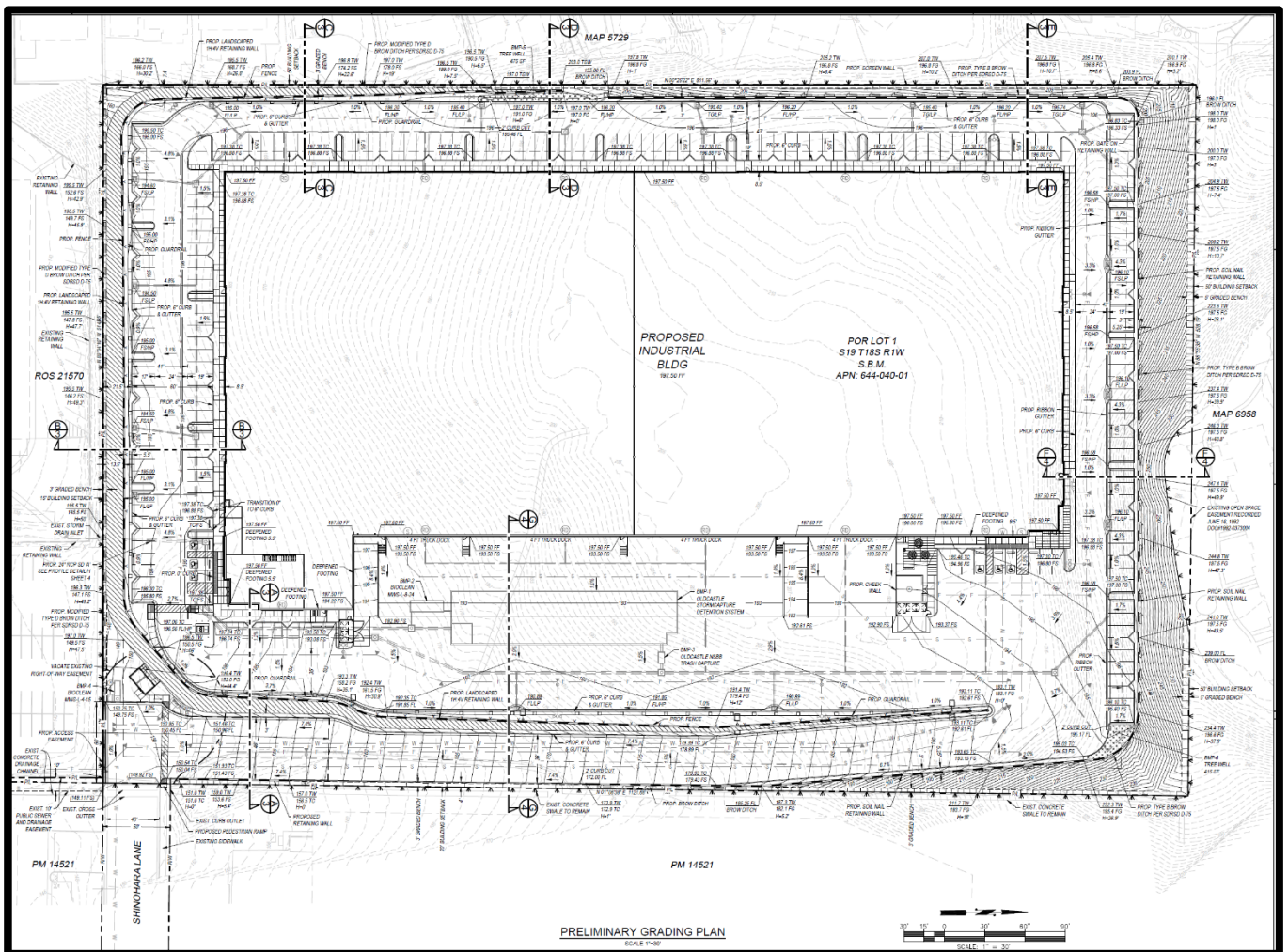


Figure 15 - Grading Plan

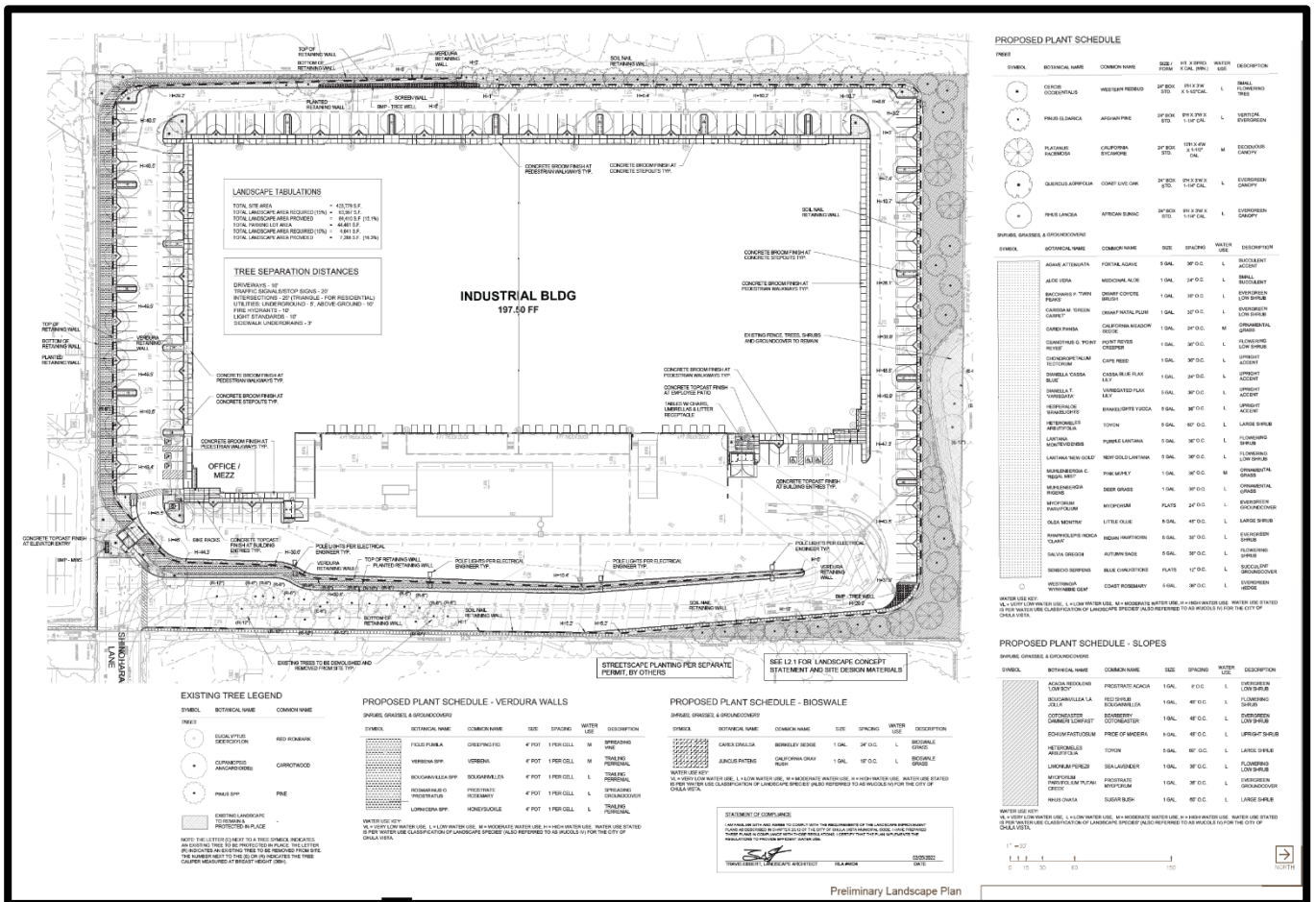


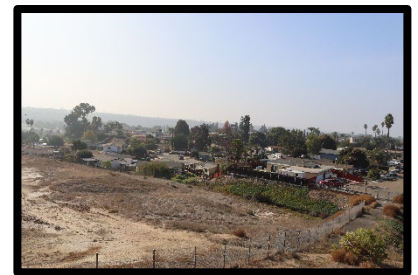
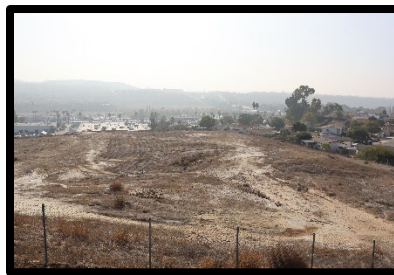
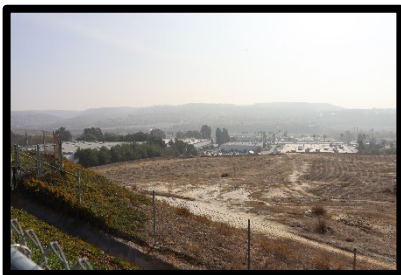
Figure 16 - Preliminary Landscape Plan

ENVIRONMENTAL ANALYSIS QUESTIONS:

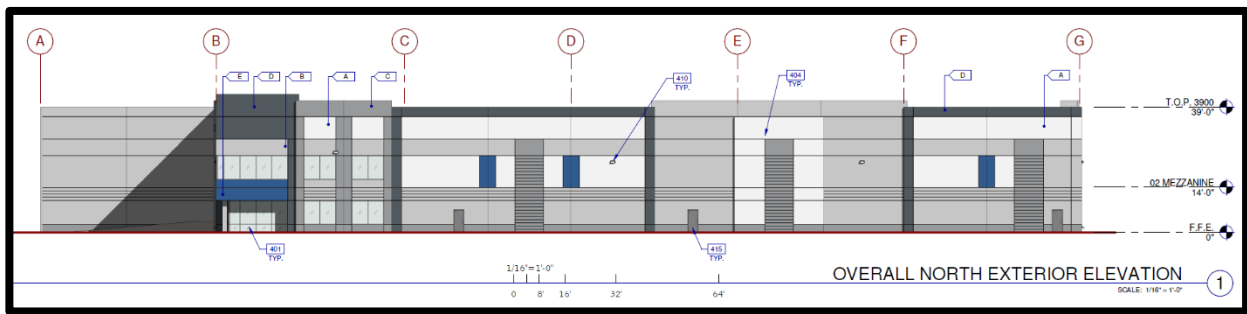
Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. AESTHETICS. Except as provided in Public Resources Code Section 21099 – Modernization of Transportation Analysis for Transit-Oriented Infill Projects – Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Comments:

- a) **Less than significant impact.** The project site is undeveloped and zoned for industrial uses in an existing industrial area known as the Brandywine/Main Distribution Center. Due to the elevations of the site, which range from 150 to 255 feet above mean sea level (amsl), the only views available are those of the properties to the north, as they are the only properties that are higher than the subject site.



The properties to the north currently have a view across the property of the Ocean View Hills area to the south and the residential neighborhood to the west. However, Ocean View Hills and the residential neighborhood to the west are not designated in the General Plan Chula Vista Vision 2020 as scenic vistas. The proposed building will be 43 feet tall (at the highest point, 39 feet tall overall) at a pad elevation of approximately 200 to 197 feet above the amsl from north to south. The existing condominium building on the north is at a pad elevation of 257 feet amsl. Therefore, the residents would still see the same northerly view across the top of the building.



Per Figure 5-4 – Designated Scenic Roadways of the General Plan Chula Vista Vision 2020 (page LUT-16), Main Street is a designated scenic roadway. “Main Street is the southernmost major east/west connector between I-805 and areas to the east. Main Street currently terminates at Heritage Road. The designated scenic portion passes near or through the Chula Vista Greenbelt and includes existing and future segments from Heritage Road to Hunte Parkway. Scenic resources include the Otay Valley Regional Park and major visitor attractions.” The project will not be visible from Main Street except intermittently, looking through and beyond the businesses that front Main Street.

The applicant will develop the project according to the Chula Vista Municipal Code requirements, [Title 19 – Planning and Zoning](#), including buildings, parking, landscaping, lighting features, and other amenities. The proposed building is of contemporary industrial design with white, light gray, and dark gray, with charcoal and blue accent colors. (Appendix A). The project will **have a less than significant impact**, directly, indirectly, or cumulatively, on scenic vistas and would not substantially change the scenic views.

- b) **No impact.** State scenic highways are designated by the California Department of Transportation (Caltrans) and are recognized as highways that maintain sensitive landscapes or valuable scenic resources within the highway viewshed. According to the Caltrans State Scenic Highway Program Mapping System, no officially designated State Scenic Highways are within the project area. The project includes a Design Review application, DR21-0032, where the project will be evaluated against the Chula Vista Municipal Code, [Title 19 – Planning and Zoning](#), and, as designed and conditioned, will have **no impact**, directly, indirectly, or cumulatively, on scenic resources within a State scenic highway.
- c) **Less than significant impact with mitigation.** The project is in an urban industrial area known as the Brandywine/Main Distribution Center. The project will not conflict with applicable zoning or other regulations governing scenic quality. As noted in Response I a) above, views of the site are limited. The project includes a Design Review application, DR21-0032, and will be evaluated against the Chula Vista Municipal Code, [Title 19 – Planning and Zoning](#). As designed and conditioned, it will have a **less than significant impact with mitigation**, directly, indirectly, or cumulatively on public views of the site and its surroundings.

Construction Impacts

The City does not have specific regulations to mitigate visual construction impacts. However, construction-related impacts would be short-term and temporary as construction activity would not be continuous. Visual impacts associated with construction activities include the exposed pad and staging areas for grading, excavation, and construction equipment. In addition, temporary structures could be located on the development site during various stages of construction, within materials storage areas, or associated with construction debris piles on site. Exposed trenches, roadway bedding, spoils/debris piles, and steel plates could be visible during street and utility infrastructure improvements. These could degrade the development site’s existing visual character, quality, and surroundings during the construction phase.

The Permittee/Owner will ensure that the pre-construction and/or construction documents include language that all construction contractors will strictly control the staging of construction equipment and

the cleanliness of construction equipment stored or driven beyond the limits of the construction work area. The construction equipment shall be parked and staged within the project site as far away from the residential properties as possible. In addition, the documents shall include language requiring that construction vehicles shall be kept clean and free of mud and dust prior to leaving the development site, and streets surrounding the development site shall be swept daily and maintained free of dirt and debris. The City Building division will ensure the language appears on the documents. The City Engineer/Building Inspectors will ensure that the requirements are maintained out in the field. With **Mitigation Measure MM AES-1**, construction impacts are **less than significant**.

Operational Impacts

The project site is located in an urbanized area industrially zoned and is appropriate and permitted for the project location. The project site is visible from areas to the north. The property is subject to compliance with the general development and design standards and parameters outlined in [Title 19 – Planning and Zoning](#). The development and design standards and parameters address development factors that would influence the visual character/quality of the development site and its surroundings. Namely, the general development standards address parcel size and coverage, density and intensity, setbacks, and building height. The design standards address site planning (i.e., site character, land use buffering, building placement, trash/loading/storage areas, and utility and mechanical equipment), parking (i.e., project entry), and architectural design (i.e., architectural style, design consistency, form/mass, roofs, building materials, and colors).

The project will be subject to compliance with general property development and use standards outlined in [Title 19 – Planning and Zoning](#). These standards are intended to ensure that all development produces an environment of desirable character that is harmonious with current and future development and protects the use and enjoyment of neighboring properties.

The project would not conflict with appropriate zoning and other regulations governing scenic quality. The project would implement the industrial zoning by constructing industrial buildings permitted as a matter of right. The development implements the vision of the Chula Vista Vision 2020 General Plan for the subject property.

As previously stated, the project includes a Design Review, DR21-0032, where the project will be evaluated against the Chula Vista Municipal Code and [Title 19 – Planning and Zoning](#). As designed and conditioned, the project will have a **less than significant impact**, directly, indirectly, or cumulatively, on the existing visual character.

- d) **Less than significant impact.** The project lighting has been designed per Chula Vista’s Municipal Code [Section 15.26.020 – Outdoor Lighting Zones](#) and [Chapter 17.28 – Unnecessary Lights](#) for operational and security purposes. Lighting is shielded to direct light downward. Glare would be kept to a minimum as the project setbacks and building materials and colors would not contribute to substantial amounts of daytime glare. The Permittee/Owner will ensure that all lighting plans meet the Municipal Code requirements. The City Planning and Building Departments will review the plans to ensure they are designed per the Code requirement, and the City Building Inspectors will ensure that the lighting has been installed per the approved Plans. With the implementation of the City’s lighting standards, the project would have a **less than significant impact**, directly, indirectly, or cumulatively, on creating new sources of substantial light or glare.

Mitigation:

- MM AES-1:** The Permittee/Owner will ensure that the pre-construction and/or construction documents include language that all construction contractors will strictly control the staging of construction equipment and the cleanliness of construction equipment stored or driven beyond the limits of the construction work area. The construction equipment shall be parked

and staged within the project site as far away from the residential properties as possible. In addition, the documents shall include language requiring that construction vehicles shall be kept clean and free of mud and dust prior to leaving the development site, and streets surrounding the development site shall be swept daily and maintained free of dirt and debris. The City Building division will ensure the language appears on the documents. The City Engineer/Building Inspectors will ensure that the requirements are maintained out in the field.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
II. AGRICULTURAL RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest protocols adopted by the California Air Resources Board. Would the project:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
in the conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				

Comments:

- a) **No impact.** A review of the Department of Conservation, California Farmland Mapping and Monitoring Program (FMMP) mapping system has found the project site is listed as Urban and Built-Up Land, defined as:

URBAN AND BUILT-UP LAND (D): Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, institutional, public administrative purposes, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.

Therefore, the project would not affect any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, and **no impact**, directly, indirectly, or cumulatively, would occur on farmland.

- b) **No impact.** The property is zoned I-L – Limited Industrial. The purpose of this zone is to encourage sound limited industrial development by providing and protecting an environment free from nuisances created by some industrial uses to ensure the purity of the total environment of Chula Vista and San Diego County and to protect nearby residential, commercial, and industrial uses from any hazards or nuisances. Agricultural uses are not permitted in the I-L Zone.

As noted in the City of Chula Vista General Plan Vision 2020 [General Plan Update Final Environmental Impact Report](#), December 2005 (Section 5.7 Agriculture page 277), there are no active Williamson Act contract properties in the City.

Given that the I-L Zone does not permit agricultural uses and the City has no Williamson Act contracts, the project will have **no impact**, directly, indirectly, or cumulatively, on zoning for agricultural use or on a Williamson Act contract.

- c) **No impact.** In Southern California, including San Diego County and the City of Chula Vista, climate and topography limit forest land types and locations and potential for commercial or industrial timber utilization. Accordingly, there is no existing or currently proposed zoning of forest land, timberland, or Timberland Production Zones within the City of Chula Vista. Also, figures released by the State of California indicate that no “California forest land” ownership, either public or private, is mapped for the City of Chula Vista. Therefore, the project would not conflict with the existing zoning for or cause rezoning of forest land, timberland, or timberland zoned Timberland Production. The project will have **no impact**, directly, indirectly, or cumulatively, on forest land.
- d) **No impact.** There is no commercial forestry or timber production within the City of Chula Vista other than possibly nursery stock production (cultivated rather than wild-harvested). Therefore, the project would not result in the loss of forest land or forest land conversion to a non-forest use. The project will have **no impact**, directly, indirectly, or cumulatively, on the loss of forest land or forest land conversion to a non-forest use.
- e) **No impact.** The project with the development of the area and, as discussed above, will have **no impact**, directly, indirectly, or cumulatively, on the conversion of Farmland to another use.

There is no commercial forestry or timber production industry within the City of Chula Vista other than possibly nursery stock production (cultivated rather than wild-harvested). Therefore, the project would not result in the loss of forest land or forest land conversion to a non-forest use. The project will have **no impact**, directly, indirectly, or cumulatively.

Mitigation: No mitigation measures are required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments:

The Shinohara Industrial Center Project Air Quality, Greenhouse Gas, and Health Risk Impact Study City of Chula Vista, CA, prepared by MD Acoustics, LLC, May 17, 2022 (Appendix C)¹, indicates the project will not result in a cumulative net increase in a criteria pollutant for which the region is in non-attainment.

- a) **No impact.** The project site is located in Chula Vista, San Diego County. It is part of the San Diego Air Basin (SDAB) under the San Diego County Air Pollution Control District (SDAPCD). San Diego County is in nonattainment for federal and state standards for ozone (8-hour) and state standards for ozone (1-hour), PM₁₀, and PM_{2.5}.²

The SDAPCD prepares air quality plans that include projected emissions inventories and account for emission reductions strategies to show how the region will achieve the ambient air quality standards by given deadlines. The applicable air quality plans for San Diego County are the Regional Air Quality Strategy (RAQS) and the 8-hour Ozone Attainment Plan (Attainment Plan).³

The California Environmental Quality Act (CEQA) requires a discussion of any inconsistencies between a proposed project and applicable General Plans and Regional Plans (CEQA Guidelines Section 15125). The regional plan that applies to the proposed project includes the San Diego Regional Air Quality

¹ Shinohara Industrial Center Project – Evaluation of Changes to Air Quality, Greenhouse Gas, and Energy Impact, City of Chula Vista, CA, prepared by MD Acoustics LLC, March 23, 2022

² San Diego County Air Pollution Control District website <https://www.sdapcd.org/content/sdapcd/planning/attainment-status.html>

³ Ibid

Strategy (RAQS). Therefore, this section discusses any potential inconsistencies of the proposed project with the RAQS.

This discussion aims to set forth the issues regarding consistency with the assumptions and objectives of the RAQS and discuss whether the proposed project would interfere with the region's ability to comply with federal and state air quality standards. If the decision-makers determine that the proposed project is inconsistent, the lead agency may consider project modifications or the inclusion of mitigation to eliminate the inconsistency.

The RAQS relies on information from the California Air Resources Board (CARB) and San Diego Association of Governments (SANDAG), including projected growth in the County, mobile, area, and all other source emissions, to project future emissions and determine strategies necessary for the reduction of stationary source emissions. Therefore, those projects that propose development consistent with the City's General Plan Chula Vista Vision 2020 are consistent with the RAQS.

According to demographic and socioeconomic estimates provided by the SANDAG Fast Facts, the City of Chula Vista is forecast to increase the number of jobs by 109 percent between 2000 and 2050, from 53,731 jobs to 121,551 jobs (SANDAG 2011).⁴ The project is an industrial use that would include additional employees in the area, and these positions would be expected to be filled by Chula Vista residents. Because the project is not residential, it would not generate direct population or housing growth. The employment growth associated with the project would be consistent with SANDAG's employment forecast and the City's General Plan. Therefore, the project is consistent with the RAQS and would have **no impact**.

- b) **Less than significant impact.** As previously noted, San Diego County is in nonattainment for federal and state standards for ozone (8-hour) and state standards for ozone (1-hour), PM₁₀, and PM_{2.5}.⁵

Cumulative projects include local development and general growth within the project area. However, as with most development, the most significant source of emissions is from mobile sources, which travel well out of the local area. Therefore, from an air quality standpoint, the cumulative analysis would extend beyond any local projects and would cover an even larger area when wind patterns are considered. Accordingly, the project's air quality cumulative analysis must be generic by nature.

For cumulative impacts from the project, the analysis must specifically evaluate the contribution to the cumulative increase in pollutants for which the San Diego Air Basin (SDAB) is designated as nonattainment for the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS). If the project does not exceed thresholds and is determined to have less than-significant project-specific impacts, it may still contribute to a significant cumulative air quality impact if the emissions from the project, in combination with the emissions from other proposed or reasonably foreseeable future projects, are in excess of established thresholds. However, the project will only have a significant cumulative impact if its contribution accounts for a significant proportion of the cumulative total emissions (i.e., it represents a "cumulatively considerable contribution" to the cumulative air quality impact).

The project area is out of attainment for O₃ for federal standards and O₃, PM₁₀, and PM_{2.5} for state standards. PM₁₀ and PM_{2.5} for state standards. Construction and operation of cumulative projects will further degrade the local air quality, as well as the air quality of the SDAB. The construction-related emissions will be below SCAQMD significance levels utilized by the City and would not significantly impact air quality. Construction will be short-term and consistent with the size and scale of the project. Construction of the project will potentially be conducted at the same time and in the same general vicinity as other major construction projects; however, in accordance with the SCAQMD methodology, projects that do not exceed the SCAQMD criteria or can be mitigated to less than the criteria levels are not

⁴ https://www.sandag.org/resources/demographics_and_other_data/demographics/fastfacts/chul.htm

⁵ San Diego County Air Pollution Control District website <https://www.sdapcd.org/content/sdapcd/planning/attainment-status.html>

significant and do not add to the overall cumulative impact. The project does not exceed any of the thresholds of significance and therefore is not considered to contribute to a significant cumulative impact on air quality. Impacts would be less than significant.

The RAQS relies on SANDAG growth projections based on population, vehicle trends, and land use plans developed by the cities and the county to develop their general plans. It is assumed that a project which conforms to the General Plan and does not have emissions exceeding operational thresholds will not create a cumulatively considerable net increase in ozone since the emissions were accounted for in the RAQS. The project site has a land use designation of Limited Industrial (IL) according to the City of Chula Vista General Plan Land Use Diagram. Per the General Plan, the IL designation is intended for light manufacturing, warehousing; certain public utilities; auto repair; auto salvage yards; and flexible-use projects that combine these uses with associated office space. Therefore, the project would be consistent with the existing general plan and zoning for the City of Chula Vista; therefore, the project would be considered consistent with the RAQS.

Furthermore, operational emissions generated by the project would be below the established significance thresholds for criteria pollutants, as shown in Table 9 below. The project's operational emissions would not significantly contribute to the region's poor air quality. Cumulative air quality impacts would, therefore, be **less than significant**.

CO Hot Spot Emissions

CO is a pollutant of significant concern along roadways because the most notable source of CO is motor vehicles. For this reason, CO concentrations are usually indicative of the local air quality generated by a roadway network and indicate potential local air quality impacts. Local air quality impacts can be assessed by comparing future CO concentrations without the project and with the project to the state and federal CO standards.

The SDAB is classified as a state attainment area and a federal maintenance area for CO. Until 2003, no violations of the state standard for CO had been recorded in the SDAB since 1991, and no violations of the national standard had been recorded in the SDAB since 1989. The violations in 2003 were likely the result of massive wildfires that occurred throughout the county. No violations of the state or federal CO standards have occurred since 2003.

Small-scale, localized concentrations of CO above the state and national standards can occur at intersections with stagnation points such as those that occur on major highways and heavily traveled and congested roadways. Localized high concentrations of CO are called "CO hot spots" and are a concern at congested intersections, where automobile engines burn fuel less efficiently and their exhaust contains more CO.

Localized CO concentration is a direct function of motor vehicle activity at signalized intersections (e.g., idling time and traffic flow conditions), particularly during peak commute hours and meteorological conditions. The SDAB is a CO maintenance area under the federal CAA. The SDAB was previously a non-attainment area and implemented a 10-year plan to meet and maintain air quality standards.

The SDAB is a CO maintenance area (the western and central part of the SDAB). To determine the impact of the project's contribution to the CO concentration of the area, a comparison can be made to analyses performed by the SCAQMD. As a screening analysis, the SCAQMD conducted CO modeling for the 2003 AQMP (Appendix V: Modeling and Attainment Demonstrations, SCAQMD 2003) for the four worst-case intersections in the SCAB: (1) Wilshire Boulevard and Veteran Avenue, (2) Sunset Boulevard, and Highland Avenue, (3) La Cienega Boulevard and Century Boulevard, and (4) Long Beach Boulevard and Imperial Highway. When the 2003 AQMP was prepared, Wilshire Boulevard and Veteran Avenue intersection was the most congested in Los Angeles County, with an average daily traffic volume of about 100,000 vehicles per day. Using CO emission factors for 2002, the peak modeled CO 1-hour

concentration was estimated to be 4.6 ppm at the intersection of Wilshire Boulevard and Veteran Avenue. The 2003 AQMP also projected 8-hour CO concentrations at these four intersections for 1997 and from 2002 through 2005. From 2002 through 2005, the maximum 8-hour CO concentration was 3.8 ppm at the Sunset Boulevard and Highland Avenue intersection. In 2002, the maximum 8-hour CO concentration was 3.4 ppm at Wilshire Boulevard and Veteran Avenue 2002.

Accordingly, CO concentrations at congested intersections would not exceed the 1-hour or 8-hour CO CAAQS unless projected daily traffic would generate more than 100,000 vehicles per day. The proposed distribution facility project is anticipated to generate approximately 4,881 vehicle trips per day. Therefore, the proposed project would not be anticipated to increase daily traffic volumes at any study intersection to more than 100,000 vehicles per day, a CO hotspot is not anticipated to occur, and associated impacts would be **less than significant**.

c) Less than significant impact.

Sensitive receptors are considered land uses or other population groups more sensitive to air pollution than others due to their exposure. As identified by the California Air Resources Board (CARB), sensitive population groups include children, the elderly, the acutely and chronically ill, and those with cardio-respiratory diseases. For CEQA purposes, a sensitive receptor would be a location where a sensitive individual could remain for 24-hours or longer, such as residencies, hospitals, schools, etc.

The closest existing sensitive receptors to the project are the single-family residential land uses located approximately 30 feet to the west and the multi-family residential land use located 40 feet to the north of the project site.

CalEEMod

The latest version of CalEEMod was used to estimate the construction emissions. The emissions incorporate SDAPCD Rules 51, 52, 54, 55, 67, and 1200 (as identified in Section 4.1 of the Air Quality, Greenhouse Gas, and Health Risk Impact Study (Appendix C)). Adherence to these rules is not considered mitigation as the project is required to incorporate these rules during construction.

Air Quality Thresholds

The City evaluated project emissions based on the quantitative emission thresholds established by the South Coast Air Quality Management District (SCAQMD). The City of Chula Vista is located within the San Diego Air Pollution Control District (SDAPCD); however, the SDAPCD has only established thresholds for stationary sources and not for CEQA purposes. Therefore, the City chose to use thresholds from the adjacent district, SCAQMD. The SCAQMD sets forth quantitative emission significance thresholds below which a project would not significantly impact ambient air quality. It should be noted that the use of these significance thresholds is conservative, as the SCAQMD's significance thresholds were originally based on the South Coast Air Basin's extreme ozone nonattainment status for the 1-hour NAAQS, whereas the SDAB was designated as an attainment area for the 1-hour NAAQS. Project-related air quality impacts estimated in this environmental analysis would be considered significant if any of the applicable significance thresholds presented below are exceeded.

As discussed above, the City has established thresholds based on the quantitative emission thresholds established by the SCAQMD. These screening criteria can demonstrate whether a project's total emissions would result in a significant impact as defined by CEQA. These daily screening thresholds for construction and operations are shown in Table 7 below.

Table 7: City of Chula Vista Air Quality Significance Thresholds		
Criteria Pollutants Mass Daily Thresholds		
Pollutant	Construction (pounds per day)	Operation (pounds per day)
VOCs	75	55
NOx	100	55
CO	550	550
SOx	150	150
PM ₁₀	150	150
PM _{2.5}	55	55
Lead*	3	3
Notes: Source: SCAQMD 2015. VOC = volatile organic compound; Nox = oxides of nitrogen; CO = carbon monoxide; Sox= sulfur oxides; PM ₁₀ = coarse particulate matter; PM _{2.5} = fine particulate matter. *The phaseout of leaded gasoline started in 1976. Since gasoline no longer contains lead, the project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.		

The thresholds listed above and in Table 7 represent screening-level thresholds that can be used to evaluate whether project-related emissions could cause a significant impact on air quality. Emissions below the screening-level thresholds would not cause a significant impact. For nonattainment pollutants, if emissions exceed the thresholds shown in Table 7, the project could potentially result in a cumulatively considerable net increase in these pollutants. It would have a significant impact on the ambient air quality.

Temporary Construction Emissions

The construction emissions for the project would not exceed the City's screening level thresholds during project construction, as demonstrated in Table 8, and therefore would be considered **less than significant**. Construction modeling parameters and assumptions can be found in Section 4.1 of the Air Quality, Greenhouse Gas, and Health Risk Impact Study (Appendix C).

Table 8: Estimated Maximum Daily Construction Criteria Air Pollutant Emissions						
Activity	Pollutant Emissions ¹					
	VOC	NOx	CO	SO ₂	PM ₁₀	PM _{2.5}
2022	2.30	26.15	21.52	0.05	8.78	4.53
2023	44.27	17.41	20.96	0.05	2.43	1.14
Maximum Daily Emissions	44.27	26.15	21.52	0.05	8.78	4.53
Chula Vista Threshold	75	100	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No
Notes: Source: CalEEMod Version 2020.4.0 ¹ Grading phases incorporate anticipated emissions reductions required by SDAPCD Rules 52, 54, and 55 to reduce fugitive dust. The architectural coating phases incorporate anticipated emissions reductions required by SDAPCD Rule 67.						

Construction-Related Toxic Air Contaminant Impact

The most significant potential for toxic air contaminant emissions would be related to diesel particulate emissions associated with heavy equipment operations during the project's construction. The Office of Environmental Health Hazard Assessment (OEHHA) has issued the Air Toxic Hot Spots Program Risk Assessment Guidelines and Guidance Manual for the Preparation of Health Risk Assessments, February 2015. It describes the algorithms, recommended exposure variates, cancer, and noncancer health values, and the air modeling protocols needed to perform a health risk assessment (HRA) under the Air Toxics Hot Spots Information and Assessment Act of 1987. Hazard identification includes identifying all substances evaluated for cancer risk and/or noncancer acute, 8-hour, and chronic health impacts and identifying any multi-pathway substances that present a cancer risk or chronic noncancer hazard via non-inhalation routes of exposure.

CARB In-Use Off-Road Diesel-Fueled Fleets Regulation limits unnecessary idling to 5 minutes, requires all construction fleets to be labeled and reported to CARB, bans Tier 0 equipment, and phases out Tier 1 and 2 equipment, thereby replacing fleets with cleaner equipment, and requires that fleets comply with Best Available Control Technology requirements.

The closest existing sensitive receptors to the project are the single-family residential land uses located approximately 30 feet to the west, and the multi-family residential land uses located 40 feet to the north of the project site.

Given the relatively limited number of heavy-duty construction equipment and the construction schedule, the project can qualitatively be determined to not result in a substantial long-term source of toxic air containment emissions and corresponding individual cancer risk. Furthermore, construction-based particulate matter (PM) emissions (including diesel exhaust emissions) do not exceed any local or regional thresholds. Therefore, **no significant short-term toxic air contaminant impacts** would occur during the project's construction.

Operational Emissions

The project's operations-related criteria air quality impacts have been analyzed using the CalEEMod model. The operating emissions were based on 2023, which is the anticipated opening year for the project. The summer and winter emissions created by the project's long-term operations were calculated, and the highest emissions from either summer or winter are summarized in Table 9. Emissions were modeled according to the parameters and assumptions established in Section 4.2 of the Air Quality, Greenhouse Gas, and Health Risk Impact Study (Appendix C).

Table 9: Estimated Maximum Daily Operational Criteria Air Pollutant Emissions						
Activity	Pollutant Emissions (pounds/day) ¹					
	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Area Sources ²	5.05	0.00	0.04	0.00	0.00	0.00
Energy Usage ³	0.01	0.08	0.07	0.00	0.01	0.01
Mobile Sources ⁴	14.83	16.79	138.02	0.29	30.23	8.20
Total Emissions	19.90	16.87	138.13	0.30	30.23	8.21
Chula Vista Thresholds	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No
¹ Source: CalEEMod Version 2020.4.0						
² Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.						
³ Energy usage consists of emissions from on-site natural gas usage.						
⁴ Mobile sources consist of emissions from vehicles and road dust.						

Table 9 shows that emissions from the project's operation do not exceed City thresholds. Therefore, the impact is considered **less than significant**.

Health Risk Assessment

Diesel Emissions Health Risk Assessment

The ongoing operation of the proposed project would generate toxic air contaminant emissions from diesel truck emissions. According to OEHHHA methodology, health effects from carcinogenic air toxics are usually described in terms of individual cancer risk. "Individual Cancer Risk" is the likelihood that a person exposed to concentrations of toxic air contaminants over a 30-year lifetime will contract cancer, based on the revised Office of Environmental Health Hazard Assessment (OEHHHA) risk-assessment methodology.⁶

⁶ In February 2015, the Office of Environmental Health Hazard Assessment updated their "Air Toxics Hot Spots Program, Risk Assessments Guidelines, Guidance Manual for Preparation of Health Risk Assessments; however, the updated OEHHHA guidance states in the page footers "do not cite or quote." SCAQMD staff have incorporated the updates into their methodology for SCAQMD's Rules 1401, 1401.1, 1402, and 212, and have updated their HRA Guidance for permitting; however, they are still in the process of updating the guidance for CEQA analyses (via working group sessions); however, to be conservative, the new OEHHHA guidance was used to assess HRA impacts in this analysis.

A health risk assessment requires the completion and interaction of four general steps:

1. Quantify project-generated TAC emissions.
2. Identify nearby ground-level receptor locations that may be affected by the emissions (including any special sensitive receptor locations such as residences, schools, hospitals, convalescent homes, and daycare centers).
3. Perform air dispersion modeling analyses to estimate ambient pollutant concentrations at each receptor location using project TAC emissions and representative meteorological data to define the transport and dispersion of those emissions in the atmosphere.
4. Characterize and compare the calculated health risks with the applicable health risk significance thresholds.

Health Risk Assessment Assumptions

Important issues that affect the dispersion modeling include the following: (1) Model Selection, (2) Source Treatment, (3) Meteorological Data, and (4) Receptor Grid. Each of these issues is addressed below.

Emission Source Estimates – DPM for Motor Vehicles

DPM emissions from the various sources were calculated using information derived from the project description and mobile source emission factors from the CARB EMFAC2017 emissions factor model. Truck mix information was obtained from the trip generation via an email provided by Linscott, Law, & Greenspan Engineers, shown in Appendix C of the Air Quality, Greenhouse Gas, and Health Risk Impact Study (Appendix C).

Four pieces of information are required to generate the mobile source emissions from the proposed project:

- Number of vehicle trips for each component of the proposed project;
- Types of vehicles that access the proposed project (passenger car vs. heavy-duty truck and gasoline vs. diesel);
- The allocation of the vehicle trips to each building that comprises the proposed project; and
- Estimate of the vehicle emission factors for estimating exhaust and idling emissions.

Estimate of Vehicle Trips and Vehicle Types

The provided trip generation information showed that the distribution project would generate approximately 4,881 (non-passenger car equivalents) vehicle trips per day. Of those vehicle trips, 132 are 4+-axle truck round trips per day (non-passenger car equivalents).⁷

Estimate of Emission Factors

The DPM emission factors for the various vehicle types were derived from the CARB EMFAC2017 mobile source emission model. The emissions factors were derived for San Diego County. Third-trimester exposure used opening year (2023) emissions factors, 2-year factors (for infant exposure) reflect years 2023 and 2024, and 14-year average factors (for child exposure during years 2-16) reflect emissions during the first 14 years of operation (2025 to 2038), the second 14 years of exposure (years 2039-2052) were used for assessment of exposure during years 16 to 30.

⁷ Trip Generation Table and email from Linscott, Law & Greenspan, Engineers are provided in Appendix C. As the 132 trucks were identified as larger truck-trailers, to be conservative, all 132 truck trips were assumed to be heavy-heavy duty trucks in the HRA modeling.

Emissions factors were estimated to establish the emissions generated 1) while the vehicles travel off-site, 2) while traveling links from the entrance to the loading docks, and 3) while idling at the loading dock during loading or unloading materials. All vehicles were assumed to travel on-site at 10 miles per hour. Off-site, the speeds along the roads were anticipated to average 35 miles per hour. Delivery vehicles were assumed to idle for a maximum of 15 minutes per vehicle per day (5 minutes per location: at loading and truck parking areas), in keeping with the CARB Air Toxic Control Measure (ATCM), which regulates truck idling time (CARB 2005). The four different sets of emissions factors used in this assessment are detailed in Table 15. It should be noted that the DPM emissions on both the gram per mile and gram per idle hour bases decline beyond 2023 for all vehicle classes and, in particular, the heavy-heavy-duty truck class (the 4+ axle “big rig” trucks). This decline is due to the CARB emissions requirements on heavy-duty trucks that call for replacing older trucks with cleaner trucks or installing diesel particulate matter filters on the truck fleet.

Emission Source Characterization

Each of the emission source types described above also requires geometrical and emission release specifications in the air dispersion model. Table 15 summarizes the assumptions used to configure the various emission sources. The following definitions are used to characterize the emission source geometrical configurations referred to in Table 15:

- **Point source:** A single, identifiable, local source of emissions; it is approximated in the AERMOD air dispersion model as a mathematical point in the modeling region with a location and emission characteristics such as the height of release, temperature, etc., for example, a truck idle location where emissions are sourced from the truck's exhaust stack while the vehicle is stationary.
- **Line source:** A series of volume sources along a path, for example, vehicular traffic volumes along a roadway.

Exhibit C provides the location of the project buildings, emission source locations, and the locations of the nearest sensitive receptors (single-family detached residential dwelling units located adjacent to the project's western property line, to the north of the project, and along Main Street and the 805 Freeway on-ramps). Residential receptors are shown as orange triangles labeled 1 through 10. The direction of on-site and off-site truck travel was obtained from either the site plan and/or based on City truck routes and the location of the nearest freeways.

Table 15: DPM Emissions Factors¹			
Vehicle Class	14-Year Average (First 14 years of Operation - 2025-2038)		
	Idling (g/hr)	On-Site Travel (g/mi)	Off-Site Travel (g/mi)
Light Heavy Duty Truck 2	0.19651	0.03328	0.01504
Medium Heavy Duty Truck	0.03054	0.00525	0.00375
Heavy Heavy Duty Truck	0.06543	0.01159	0.00885
Vehicle Class	14-Year Average (Second 14 years of Operation - 2039-2052)		
	Idling (g/hr)	On-Site Travel (g/mi)	Off-Site Travel (g/mi)
Light Heavy Duty Truck 2	0.15465	0.02840	0.01416
Medium Heavy Duty Truck	0.02499	0.00433	0.00361
Heavy Heavy Duty Truck	0.05351	0.00955	0.00796
Vehicle Class	2-Year Average (2023-2024)		
	Idling (g/hr)	On-Site Travel (g/mi)	Off-Site Travel (g/mi)
Light Heavy Duty Truck 2	0.27215	0.04243	0.01700
Medium Heavy Duty Truck	0.04108	0.00697	0.00392

Table 15: DPM Emissions Factors ¹			
Heavy Heavy Duty Truck	0.08755	0.01505	0.01020
Vehicle Class	1-Year Average (Opening Year-2022)		
	Idling (g/hr)	On-Site Travel (g/mi)	Off-Site Travel (g/mi)
Light Heavy Duty Truck 2	0.29932	0.04582	0.01781
Medium Heavy Duty Truck	0.31208	0.05278	0.02937
Heavy Heavy Duty Truck	0.30984	0.04653	0.02200

¹ Source: EMFAC2017.

Exhibit C

AERMOD Model Source and Receptor Placement



Receptor Network

The assessment requires that a network of receptors be specified where the impacts can be computed at the various locations surrounding the project. Discrete receptors were located at existing sensitive residential receptors surrounding the proposed project (as detailed above). Discrete receptors are identified as orange triangles and numbered 1 through 10. In addition, the identified sensitive receptor's locations were supplemented by the specification of a modeling grid that extended around the proposed project to identify other potential locations of impact. See Exhibit C for details.

Dispersion Modeling

The next step in the assessment process utilizes the emissions inventory, a mathematical air dispersion model, and representative meteorological data to calculate impacts at the various receptor locations. The dispersion model used in this assessment is described below.

Model Selection

To assess air quality and health risk impacts from pollutant emissions from this project, the USEPA AERMOD Model was applied, an air dispersion model accepted by the SDAPCD for performing health risk assessment analyses. AERMOD predicts pollutant concentrations from a point, area, volume, line, and flare sources with variable emissions in terrain from flat to complex, including building downwash effects from buildings on pollutant dispersion (as applicable). It captures the essential atmospheric physical processes and provides reasonable estimates over a wide range of meteorological conditions and modeling scenarios.

General Model Assumptions

A summary of Emission Configurations is shown in Table 15. The basic options used in the dispersion modeling are summarized in Table 17.

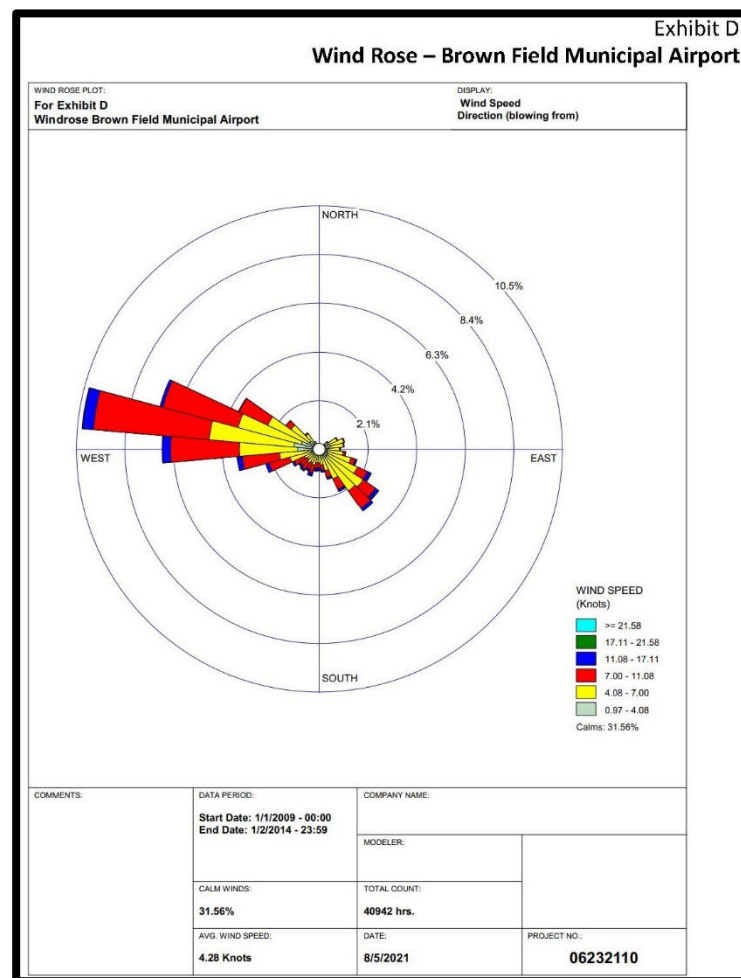
As indicated in Table 16, the analysis considers the effects of building downwash on the dispersion of emissions from the various sources located on the project's property. Building downwash occurs when the aerodynamic turbulence induced by nearby buildings causes pollutants emitted from an elevated source to be mixed rapidly toward the ground (downwash), resulting in potentially higher ground-level concentrations than if the buildings were not present. The AERMOD dispersion model contains algorithms to account for building downwash effects. The required information includes the location of the emission source, the location of adjacent buildings, and the building geometry in terms of length, width, and height. The emission source and building locations were taken from the project site plan for this analysis. The proposed building geometries were estimated from the project plans, assuming a building height of 40 feet.

Table 16: Summary of Emission Configurations		
Emission Source Type	Geometric Configuration	Relevant Assumptions
Off-Site Diesel Truck Traffic	Line Sources	Stack release height: 12 feet
		Vehicle speed: 35 mph
		Length of the line source (Shinohara Ln from project driveway to Brandywine Ave, Brandywine Ave from Shinohara Ln to Main St, Main Street from Brandywine Ave to 805 Fwy, 805 Fwy NB Ramp, & 805 Freeway SB Ramp)
		Vehicle types: heavy-heavy-duty diesel delivery trucks
		Emission factor: CARB EMFAC2017
On-Site Diesel Truck Traffic	Line Sources	Stack release height: 12 feet
		Vehicle speed: 10 mph
		Length of the line source (distance from the facility entrance to the loading docks)
		Vehicle types: heavy-heavy-duty diesel delivery trucks
On-Site Diesel Truck Idling	Point Sources located at the loading dock	Emission factor: CARB EMFAC2017
		Stack release height: 12 feet
		Stack release characteristics
		> Stack diameter: 0.1 meter (0.3 feet)
		> Stack velocity: 51.9 mps (170 feet/sec)
		> Stack temperature: 366 °k (200° F)
		Idle time: 15 minutes per truck per day
		Vehicle types: heavy-heavy-duty diesel delivery trucks
		Emission factor: CARB EMFAC2017

Table 17: General Modeling Assumptions – AERMOD Model	
Feature	Option Selected
Terrain processing	AERMAP-generated NED GEOTIFF 30 m
Regulatory dispersion options	See Table 15
Land use	Rural
Coordinate system	UTM Zone 11 North
Building downwash	Included in calculations
Receptor height	0 meters above ground (per OEHHA methodology)
Meteorological data	SDAPCD Brown Field Municipal Airport Meteorological Data

Meteorological Data

Meteorological data from the Brown Field Municipal Airport station was selected for this modeling application.⁸ The meteorological input files were processed using the AERMET program from Lakes Environmental. They are developed based on the five-year data sets covering 1/1/2009 to 1/2/2014 (Exhibit D shows a Wind Rose for Brown Field Municipal Airport).



Estimation of Health Risks

Health risks from diesel particulate matter are twofold. First, diesel particulate matter is a carcinogen, according to the State of California. Second, long-term chronic exposure to diesel particulate matter can cause health effects on the respiratory system. Each of these health risks is discussed below. Health risk calculations were based on the most recent Office of Environmental Health Hazard Assessment guidance, as detailed below.

⁸ Source: <https://ww2.arb.ca.gov/resources/documents/harp-aermod-meteorological-files>

Cancer Risks

According to the *Risk Assessment Guidelines: Guidance Manual for Preparation of Health Risk Assessments*, released by the Office of Environmental Health Hazard Assessment (OEHHA) in February 2015 and formally adopted in March 2015, the residential inhalation dose for long-term cancer risk assessment should be calculated using the following formula:

$$[\text{Dose-air (mg/(Kg-day))}] * \text{Cancer Potency} * [1 \times 10^{-6}] = \text{Potential Cancer Risk}$$

Where:

Cancer Potency Factor = 1.1

$$\text{Dose-inh} = (\text{C}_{\text{air}} * \text{DBR} * \text{A} * \text{EF} * \text{ED} * \text{ASF} * \text{FAH} * 10^{-6}) / \text{AT}$$

Where:

DBR	[Daily breathing rate (L/kg bodyweight – day)] = 261 for adults, 572 for children, 1,090 for infants, and 361 for the 3rd trimester per OEHHA guidance.
A	[Inhalation absorption factor] = 1
EF	[Exposure frequency (days/year)] = 350
ED	[Exposure duration (years)] = 30 for adults (for an individual who is an adult at the opening year), 14 for children (from 2-16 years), 14 for adults (from 16-30 years), 2 for infants, and 1 for 3rd Trimester
ASF	[Age sensitivity factor] = 10 for 3rd trimester to 2 years of age, 3 for 2 to 16 years of age, and 1 for 16 to 30 years of age
FAH	[Fraction of time spent at home] = 1 for 3rd trimester to 2 years of age, 1 for 2 to 16 years of age, and 0.73 for 16 to 30 years of age
10 ⁶	[Micrograms to milligrams conversion]
AT	[Average time period over which exposure is averaged in days] = 25,550

The model run results are shown in Appendix C of the Air Quality, Greenhouse Gas, and Health Risk Impact Study (Appendix C). Exhibit E illustrates the cancer risk in the most affected age group, infants (0-2 years).

Unmitigated Annual DPM Emissions – Infants 2023 - 2024

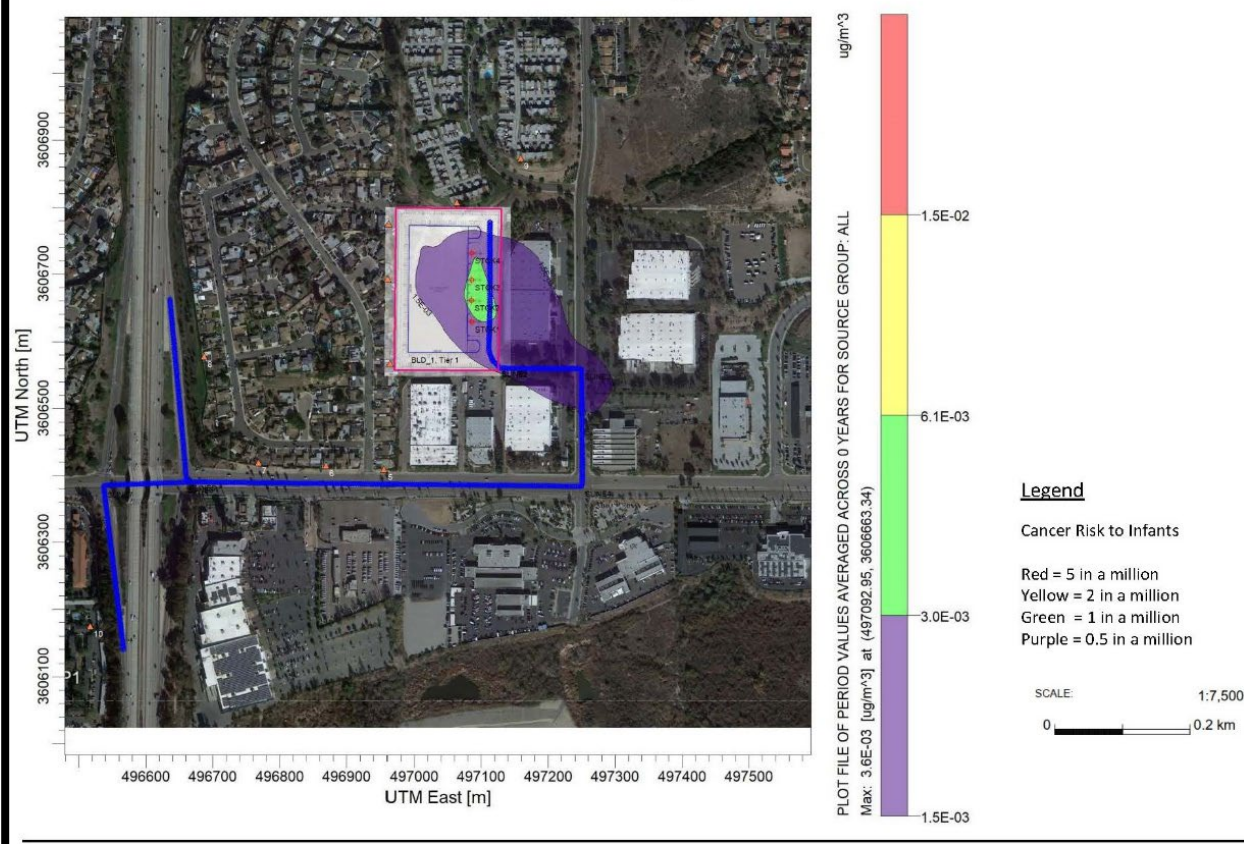


Table 18 shows the cancer risk for the unborn child during the 3rd trimester; Table 19 shows the cancer risk for infants (0-2 years), Table 20 shows the cancer risk for children ages 2 to 16 years, and Table 21 shows the cancer risk as that child becomes an adult (years 16-30). The highest cancer risk corresponds to infants (0-2 years) (see Table 19) and is at receptor 5, with a maximum risk of 0.51 in one million. The highest child cancer risk 2-16 years is also at receptor 5, with a maximum risk of 0.48 in one million. Therefore, no children or infants are exposed to cancer risks in excess of 10 in a million.

Table 18: Carcinogenic Risks and Non-Carcinogenic 3rd Trimester Exposure Scenario (0.25-years) - 2022

Receptor ID (a)	Maximum Concentration		Weight Fraction (d)	Contaminant (e)	Carcinogenic Hazards		Noncarcinogenic Hazards		
	(ug/m3) (b)	(mg/m3) (c)			CPF (mg/kg/day) (f)	RISK (per million) (g)	REL (ug/m3) (h)	RfD (mg/kg/day) (i)	Index (j)
1	0.0019	1.9E-06	1.00E+00	DPM	1.1E+00	0.03	5.0E+00	1.4E-03	0.0004
2	0.0035	3.5E-06	1.00E+00	DPM	1.1E+00	0.05	5.0E+00	1.4E-03	0.0007
3	0.0035	3.5E-06	1.00E+00	DPM	1.1E+00	0.05	5.0E+00	1.4E-03	0.0007
4	0.002	2.0E-06	1.00E+00	DPM	1.1E+00	0.03	5.0E+00	1.4E-03	0.0004
5	0.0034	3.4E-06	1.00E+00	DPM	1.1E+00	0.05	5.0E+00	1.4E-03	0.0007
6	0.0029	2.9E-06	1.00E+00	DPM	1.1E+00	0.04	5.0E+00	1.4E-03	0.0006
7	0.0025	2.5E-06	1.00E+00	DPM	1.1E+00	0.03	5.0E+00	1.4E-03	0.0005
8	0.0011	1.1E-06	1.00E+00	DPM	1.1E+00	0.01	5.0E+00	1.4E-03	0.0002
9	0.0007	6.9E-07	1.00E+00	DPM	1.1E+00	0.01	5.0E+00	1.4E-03	0.0001
10	0.0007	6.7E-07	1.00E+00	DPM	1.1E+00	0.01	5.0E+00	1.4E-03	0.0001

Table 18: Carcinogenic Risks and Non-Carcinogenic 3 rd Trimester Exposure Scenario (0.25-years) - 2022									
Receptor ID (a)	Maximum Concentration		Weight Fraction (d)	Contaminant (e)	Carcinogenic Hazards		Noncarcinogenic Hazards		
	(ug/m3) (b)	(mg/m3) (c)			CPF	RISK (per million)	REL	RfD	Index
					(mg/kg/day) (f)	(g)	(ug/m3) (h)	(mg/kg/day) (i)	
Note:	OEHHA 95th percentile exposure factors used to calculate TAC intake:								
	Exposure Frequency (days/year)			350					
	Exposure Duration (years)			0.25					
	Daily Breathing Rate			361					
	Age Sensitivity Factor			10					
	Fraction of Time At Home (FAH)			1					
	Averaging Time _(cancer) (days)			25550					
	Averaging Time _(non-cancer) (days)			91.25					
E= 10 ^X , i.e. E-02 = 10 ⁻²									

Table 19: Carcinogenic Risks and Non-Carcinogenic Infant Exposure Scenario (2-year) – 2023-2024									
Receptor ID (a)	Maximum Concentration		Weight Fraction (d)	Contaminant (e)	Carcinogenic Hazards		Noncarcinogenic Hazards		
	(ug/m3) (b)	(mg/m3) (c)			CPF (mg/kg/day) (f)	RISK (per million) (g)	REL (ug/m3) (h)	RfD (mg/kg/day) (i)	Index (j)
1	0.0006	5.5E-07	1.00E+00	DPM	1.1E+00	0.18	5.0E+00	1.4E-03	0.0001
2	0.001	1.0E-06	1.00E+00	DPM	1.1E+00	0.34	5.0E+00	1.4E-03	0.0002
3	0.001	1.0E-06	1.00E+00	DPM	1.1E+00	0.34	5.0E+00	1.4E-03	0.0002
4	0.0007	6.6E-07	1.00E+00	DPM	1.1E+00	0.22	5.0E+00	1.4E-03	0.0001
5	0.0015	1.5E-06	1.00E+00	DPM	1.1E+00	0.51	5.0E+00	1.4E-03	0.0003
6	0.0013	1.3E-06	1.00E+00	DPM	1.1E+00	0.42	5.0E+00	1.4E-03	0.0003
7	0.0011	1.1E-06	1.00E+00	DPM	1.1E+00	0.35	5.0E+00	1.4E-03	0.0002
8	0.0004	4.0E-07	1.00E+00	DPM	1.1E+00	0.13	5.0E+00	1.4E-03	0.0001
9	0.0002	2.1E-07	1.00E+00	DPM	1.1E+00	0.07	5.0E+00	1.4E-03	0.0000
10	0.0003	2.9E-07	1.00E+00	DPM	1.1E+00	0.10	5.0E+00	1.4E-03	0.0001
Note: OEHHHA 95th percentile exposure factors used to calculate TAC intake: Exposure Frequency (days/year) 350 Exposure Duration (years) 2.00 Daily Breathing Rate 1090 Age Sensitivity Factor 10 Fraction of Time At Home (FAH) 1 Averaging Time _(cancer) (days) 25550 Averaging Time _(non-cancer) (days) 730 E= 10 ^X , i.e. E-02 = 10 ⁻²									

Table 20: Carcinogenic Risks and Non-Carcinogenic Child Exposure Scenario – 2025-2038

Receptor ID (a)	Maximum Concentration		Weight Fraction (d)	Contaminant (e)	Carcinogenic Hazards		Noncarcinogenic Hazards		
	(ug/m3) (b)	(mg/m3) (c)			CPF (mg/kg/day) (f)	RISK (per million) (g)	REL (ug/m3) (h)	RfD (mg/kg/day) (i)	Index (j)
1	0.00042	4.2E-07	1.00E+00	DPM	1.1E+00	0.15	5.0E+00	1.4E-03	0.0001
2	0.00079	7.9E-07	1.00E+00	DPM	1.1E+00	0.29	5.0E+00	1.4E-03	0.0002
3	0.00079	7.9E-07	1.00E+00	DPM	1.1E+00	0.29	5.0E+00	1.4E-03	0.0002
4	0.00052	5.2E-07	1.00E+00	DPM	1.1E+00	0.19	5.0E+00	1.4E-03	0.0001
5	0.00133	1.3E-06	1.00E+00	DPM	1.1E+00	0.48	5.0E+00	1.4E-03	0.0003
6	0.00109	1.1E-06	1.00E+00	DPM	1.1E+00	0.39	5.0E+00	1.4E-03	0.0002
7	0.00091	9.1E-07	1.00E+00	DPM	1.1E+00	0.33	5.0E+00	1.4E-03	0.0002
8	0.00033	3.3E-07	1.00E+00	DPM	1.1E+00	0.12	5.0E+00	1.4E-03	0.0001
9	0.00016	1.6E-07	1.00E+00	DPM	1.1E+00	0.06	5.0E+00	1.4E-03	0.0000
10	0.00025	2.5E-07	1.00E+00	DPM	1.1E+00	0.09	5.0E+00	1.4E-03	0.0001

Note: OEHHHA 95th percentile exposure factors used to calculate TAC intake:

Exposure Frequency (days/year)	350
Exposure Duration (years)	14
Daily Breathing Rate	572
Age Sensitivity Factor	3
Fraction of Time At Home (FAH)	1
Averaging Time _(cancer) (days)	25550
Averaging Time _(non-cancer) (days)	5110
E= 10 ^X , i.e. E-02 = 10 ⁻²	

Table 21: Carcinogenic Risks and Non-Carcinogenic Adult Exposure Scenario (16-30 years) – 2039-2052

Receptor ID (a)	Maximum Concentration		Weight Fraction (d)	Contaminant (e)	Carcinogenic Hazards		Noncarcinogenic Hazards		
	(ug/m3) (b)	(mg/m3) (c)			CPF (mg/kg/day) (f)	RISK (per million) (g)	REL (ug/m3) (h)	RfD (mg/kg/day) (i)	Index (j)
1	0.00034	3.4E-07	1.00E+00	DPM	1.1E+00	0.01	5.0E+00	1.4E-03	0.0001
2	0.00065	6.5E-07	1.00E+00	DPM	1.1E+00	0.03	5.0E+00	1.4E-03	0.0001
3	0.00065	6.5E-07	1.00E+00	DPM	1.1E+00	0.03	5.0E+00	1.4E-03	0.0001
4	0.00044	4.4E-07	1.00E+00	DPM	1.1E+00	0.02	5.0E+00	1.4E-03	0.0001
5	0.0012	1.2E-06	1.00E+00	DPM	1.1E+00	0.05	5.0E+00	1.4E-03	0.0002
6	0.00098	9.8E-07	1.00E+00	DPM	1.1E+00	0.04	5.0E+00	1.4E-03	0.0002
7	0.00081	8.1E-07	1.00E+00	DPM	1.1E+00	0.03	5.0E+00	1.4E-03	0.0002
8	0.00029	2.9E-07	1.00E+00	DPM	1.1E+00	0.01	5.0E+00	1.4E-03	0.0001
9	0.00013	1.3E-07	1.00E+00	DPM	1.1E+00	0.01	5.0E+00	1.4E-03	0.0000
10	0.00022	2.2E-07	1.00E+00	DPM	1.1E+00	0.01	5.0E+00	1.4E-03	0.0000

Note: OEHHHA 95th percentile exposure factors used to calculate TAC intake:

Exposure Frequency (days/year)	350
Exposure Duration (years)	14
Daily Breathing Rate	261

Table 21: Carcinogenic Risks and Non-Carcinogenic Adult Exposure Scenario (16-30 years) – 2039-2052									
Receptor ID (a)	Maximum Concentration		Weight Fraction (d)	Contaminant (e)	Carcinogenic Hazards		Noncarcinogenic Hazards		
	(ug/m3) (b)	(mg/m3) (c)			CPF (mg/kg/day) (f)	RISK (per million) (g)	REL (ug/m3) (h)	RfD (mg/kg/day) (i)	Index (j)
Age Sensitivity Factor				1					
Fraction of Time At Home (FAH)				0.73					
Averaging Time _(cancer) (days)				25550					
Averaging Time _(non-cancer) (days)				5110					
E= 10 ^X , i.e. E-02 = 10 ⁻²									

Estimated cancer risk was based on a conservative maximum duration that a long-term resident might live on the property, i.e., 30 years. Based on these conservative assumptions, the 30.25-year cumulative carcinogenic health risk (3rd trimester [-0.25 to 0 years] + infant [0-2 years] + child [2-16 years] + adult [16-30 years]) to an individual born during the opening year of the project, and located in the project vicinity for the entire 30-year duration, is a maximum of 1.08 in a million at receptor location 5, as shown in Table 22.

Table 22: Cumulative Carcinogenic Risk 30.25-Year Exposure Scenario	
Receptor ID	Cumulative RISK (per million)
1	0.37
2	0.70
3	0.70
4	0.45
5	1.08
6	0.89
7	0.74
8	0.28
9	0.14
10	0.20

Therefore, as the residential cancer risk does not exceed 10 in a million, the ongoing operations of the proposed project would result in a **less than significant impact** due to the cancer risk from diesel emissions created by the proposed project.

Non-Cancer Risks

The equation gives the relationship for non-cancer health effects:

$$\text{HIDPM} = \text{CDPM} / \text{RELDPM}$$

Where:

HIDPM	=	Hazard Index; an expression of the potential for non-cancer health effects.
CDPM	=	Annual average diesel particulate matter concentration in µg/m ³ .
RELDPM	=	Reference Exposure Level (REL) for diesel particulate matter; the diesel particulate matter concentration at which no adverse health effects are anticipated.

The non-carcinogenic hazards to adult, child, and infant receptors are also detailed in Tables 18 through 21 columns (j). The RELDPM is 5 µg/m³. The Office of Environmental Health Hazard Assessment has established this concentration as protective for the respiratory system. Using the maximum DPM concentration from the years 2022-2052, the resulting Hazard Index is:

$$\text{HIDPM} = 0.0035/5 = 0.0007$$

The criterion for significance is a Hazard Index increase of 1.0 or greater. Therefore, the proposed project would have a **less than significant impact** due to the non-cancer risk from diesel emissions created by the proposed project.

- d) **No impact.** The closest existing sensitive receptors to the project are the single-family residential land uses located approximately 30 feet to the west and the multi-family residential land use located 40 feet to the north of the project site. SDAPCD Rule 51, commonly referred to as the public nuisance rule, prohibits emissions from any source in such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to the public health or damage to property. The potential for an operation to result in odor complaints from a “considerable” number of persons in the area would be considered to be a significant, adverse odor impact.

Potential sources that may emit odors during construction activities include the application of materials such as asphalt pavement. The objectionable odors that may be produced during the construction process are short-term in nature. The odor emissions are expected to cease upon the drying or hardening of the odor-producing materials. Diesel exhaust and VOCs would be emitted during the project's construction, which are objectionable to some; however, emissions would disperse rapidly from the project site and, therefore, should not reach an objectionable level at the nearest sensitive receptors. Furthermore, construction emissions would not exceed the City of Chula Vista thresholds. Due to the short-term nature and limited amounts of odor-producing materials being utilized, no significant impact related to odors would occur during the proposed project's construction.

Land uses and industrial operations typically associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, refineries, landfills, dairies, and fiberglass molding. The proposed operations include a site-specific warehouse/distribution use that includes 9,230 square feet of office use and 168,926 square feet of warehouse/distribution use. The anticipated uses for the proposed industrial use are not typically associated with objectionable odors. Therefore, this project will have **no impact** on emissions (such as those leading to odors), adversely affecting a substantial number of people.

Mitigation: No mitigation measures are required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES. Would the project:				
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 Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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 Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with an established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or another approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments:

The results of the Biology Letter Report for 517 Shinohara Lane, City of Chula Vista, California, prepared by Dudek on July 6, 2022 (Appendix D), have found the project will have a less than significant impact with mitigation on species identified as a candidate, sensitive or special status species. The Biology Letter Report is cited here using Section 6 – Project Impacts and Section 7 – Mitigation (pages 9 – 13).

a) Less than significant with mitigation.

Vegetation Communities and Land Cover Types

Direct Impacts

The proposed project would impact the entire site. The acreages and mitigation requirements are summarized in Table 1 below. Urban/developed lands and disturbed habitat provide little native habitat value and foraging opportunities for wildlife, and impacts to these vegetation communities/land covers would not be considered significant. No mitigation is required for impacts to eucalyptus woodland, disturbed habitat, or urban/developed lands, in accordance with the requirements in the Habitat Loss Incidental Take (HLIT) ordinance.

Direct impacts to 0.54 acres of disturbed Diegan coastal sage scrub and 7.05 acres of non-native grassland would be considered significant, and mitigation would be required, according to the requirements and ratios in the HLIT ordinance and Table 5-3 of the City of Chula Vista Multiple Species Conservation Plan (MSCP)

(Table 1). Impacts would be reduced to **less than significant** through the implementation of Mitigation Measure **MM-BIO-1**.

Table 1. Vegetation Communities and Land Cover within the Study Area

Habitat Type	Tier	Acreage	Mitigation Ratios ¹	Required Mitigation (Ac)
Disturbed Diegan coastal sage scrub	II	0.54	1:1	0.54
Eucalyptus woodland	IV	0.10	N/A	0
Non-native grassland	III	7.05	0.5:1	3.52
Disturbed Habitat	IV	2.06	N/A	0
Urban/Developed	IV	0.29	N/A	0
Total	--	10.03	--	4.06

1. The mitigation ratios range is based on the mitigation location of the mitigation inside the preserve).



Indirect Impacts

The entire site would be impacted so that no short-term indirect impacts would occur to on-site vegetation communities. Short-term indirect impacts that may affect the small amount of undeveloped areas adjacent to the project site include dust, invasive plant species, and increased human presence. Typical construction BMPs will limit the spread of dust. The increased human presence is a potential short-term indirect impact. During construction, typical BMPs, such as having trash containers on-site, a

demarcated limit of work, and contractor education, will limit the potential for trash and other human disturbance. The project plans will incorporate methods to control runoff, including a Storm Water Pollution Prevention Plan (SWPPP) to meet National Pollution Discharge Elimination System (NPDES) regulations. Therefore, short-term indirect impacts to off-site, adjacent vegetation communities are not considered significant.

The only potential long-term indirect impact is the change in stormwater discharge hydrology downstream of the project. The project will be designed in accordance with NPDES regulations, and as such, the project will have no impact on any long-term indirect adverse impacts

Special-Status Plant Species

Direct Impacts

No special-status plants were detected in the project study area during the 2018 or 2021 surveys. While focused rare plant surveys were not conducted, there are no special-status plant species with a moderate or high potential to occur within the project study area, and, due to the extent of vegetative disturbance and lack of suitable substrate, special-status plant species are not expected to occur (see Appendix D of the Biology Letter Report Appendix D). Therefore, no significant direct impacts to special-status plants are anticipated.

Indirect Impacts

Following completion of the vegetation mapping in 2018 and site visit in 2021, there are no special-status plant species with moderate to high potential to occur adjacent to the study area. Therefore, indirect impacts on off-site special-status plant species are not expected.

Special-Status Wildlife Species

Direct Impacts

Monarch butterfly (*Danaus plexippus*) was observed nectaring on-site during the July 2021 site visit. While there are flowering plants, the site lacks this species host plant (*Asclepias* spp.) and suitable overwintering habitat. While burrowing owl has low potential to occur, if this species were to occur on-site prior to project activities, impacts to an active nest would be considered significant, absent mitigation. Impacts would be reduced to **less than significant** through the implementation of **MM BIO-2**.

No other special-status wildlife species were detected during the 2018 or 2021 surveys, and the potential for special-status species to occur in the study area is low due to the disturbed nature of the site (past grading, presence of invasive species, etc.), and the location is surrounded by urban development (Appendix E of the Biology Letter Report Appendix D). Based on this information, no additional significant direct impacts to special-status wildlife species are anticipated.

All raptors species are considered special-status and may use the site for foraging. Stands of small ornamental trees are present within the project study area, and a red-shouldered hawk (*Buteo lineatus*) was seen soaring over the site; however, no nests were observed. Although raptor species can occur in the study area, lands within the impact footprint are primarily disturbed. The ornamental trees on site are small, and it is unlikely that special-status raptors would use the site for nesting.

Indirect Impacts

Most indirect impacts on vegetation communities previously described can also affect special-status wildlife. Wildlife may also be indirectly affected in the short term by construction-related noise, which can disrupt normal activities and subject wildlife to higher predation risks. Adverse edge effects can cause degradation of habitat quality through the invasion of pest species. Nesting birds can be significantly affected by short-term construction-related noise, resulting in the disruption of foraging, nesting, and reproductive activities.

The project study area supports suitable vegetation for bird nesting, including trees associated with the street and property landscaping and vegetated areas mapped onsite, nesting habitat for common raptors (e.g., red-tailed hawk) songbirds protected by the Migratory Bird Treaty Act. Indirect impacts from construction-related noise may occur to breeding wildlife if construction occurs during the breeding season (i.e., February 1 through September 15). Wildlife would be significantly affected by noise based on suitable habitat in the project vicinity. Species whose breeding/nesting may be significantly impacted by noise include common raptor species. This impact would be considered a significant impact, absent mitigation. Impacts would be reduced to **less than significant** through the implementation of **MM BIO-3**.

The project could 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 Game or U.S. Fish and Wildlife Service. However, as discussed above, with the implementation of mitigation measures **MM BIO-1** through **MM BIO-3**, the impacts will be **less than significant with mitigation**.

b) **No impact.**

No jurisdictional resources were identified within the project impact area. Therefore, there are no direct or indirect impacts to waters of the U.S., including wetlands.

Therefore, the project will have **no impact** on any riparian habitat or other sensitive natural Community identified in local or regional plans, policies, regulations, or the California Department of Fish and Game or U.S. Fish and Wildlife Service.

c) **No impact.** The project disturbed area does not have any state or federally protected wetlands. Therefore, the project will have **no adverse impact** on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

d) **No impact.**

The project is surrounded by urban development, has no habitat connectivity, and serves no wildlife movement functions. Therefore, there are **no significant impacts** on wildlife corridors or habitat linkages.

e) **Less than significant impact.** The City does have a Tree Preservation Policy ([Policy Number 576-05](#)) City Council Resolution No. 6192. However, this policy concerns the preservation of street trees, and no street trees are proposed for removal with the project.

The project site is located within the Development Area of the City Planning Component as identified in the Subarea Plan of the MSCP. It has not been identified as a strategic preserve area within the City, nor is it located within a designated conservation area; therefore, the project would not impact the goals and objectives of the City's Subarea Plan.

The project will impact native vegetation and wetlands (i.e., maritime succulent scrub; tamarisk scrub), and as such, the project is subject to conformance with the City's HLIT Ordinance. The HLIT Ordinance findings are provided in Tables 2, 3, and 4 of the Biological Letter Report (Appendix D).

Implementation of the project would not conflict with any local policies or ordinances protecting biological resources, and the project would have **less than significant impact**.

f) **No impact.**

Direct Impact

The project design is consistent with the MSCP Subarea Plan through specific adherence to mitigation/conveyance requirements for Development Projects Outside of Covered Projects as defined in the City MSCP Subarea Plan. As noted in Section 1, Introduction of the Biological Technical Report (Appendix D), the project is located within the Development Area of the City Planning Component as identified in the Subarea Plan. It has not been identified as a strategic preserve area within the City, nor is it located within a designated conservation area/preserve. The project site is separated from the Otay River preserve by Main Street and, therefore, is not subject to the Adjacency Management Issues. Overall, the project is consistent with the goals and objectives of the City's Subarea Plan.

Appendices D and E of the Biological Technical Report (Appendix D) include a list of the plant and wildlife species observed or potentially occurring on-site that are Covered species under the MSCP and their conditions of coverage from Table 3-5 of the Subarea Plan.

Indirect Impact

The project design is consistent with the MSCP Subarea Plan through specific adherence to mitigation/conveyance requirements for Development Projects Outside of Covered Projects as defined in the City MSCP Subarea Plan. As noted in Section 1.3, Site Description of the Biological Technical Report (Appendix D), the project site is located within the Development Area of the City Planning Component as identified in the Subarea Plan. It has not been identified as a strategic preserve area within the City, nor is it located within a designated conservation area.

Therefore, the project does not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or another approved local, regional, or state habitat conservation plan and has **no impact**.

Mitigation:

MM BIO-1: Compensatory Uplands Mitigation: Per the HLIT ordinance, 7.59 acres of impacts to sensitive uplands shall be mitigated at the required mitigation ratios (Table 1). To compensate for the loss of 0.54 acre of disturbed coastal sage scrub (Tier II) and 7.05 acres of non-native grassland (Tier III), mitigation would be provided through compensatory upland mitigation.

Compensatory Uplands Mitigation. Prior to the issuance of any grading permit including clearing, grubbing, grading, and construction permits, the project applicant shall mitigate direct impacts to 0.54 acres of coastal sage scrub habitat pursuant to the City of Chula Vista Multiple Species Conservation Program (MSCP) Subarea Plan (Subarea Plan) and Habitat Loss Incidental Take (HLIT) Ordinance. Per the HLIT Ordinance, impacts on coastal sage scrub shall be mitigated at the ratios identified in the MSCP Subarea Plan Table 5-3. Considering the project site is located outside of the preserve, coastal sage scrub mitigation shall be provided through the purchase of credits at the San Miguel Conservation Bank at a 1:1 ratio. The project applicant shall mitigate direct impacts to 7.05 acres of non-native grassland habitat pursuant to the City of Chula Vista MSCP Subarea Plan and HLIT Ordinance. Per the HLIT Ordinance, impacts on non-native

grassland shall be mitigated at the ratios identified in the MSCP Subarea Plan Table 5-3. Considering the project site is located outside of the preserve, non-native grassland mitigation through the purchase of credits at the San Miguel Conservation Bank at a 0.5:1 ratio.

The applicant shall secure mitigation credits within the San Miguel Conservation Bank. Mitigation Credits shall be for habitat of equivalent or higher habitat value than coastal sage scrub for impacts to coastal sage scrub and equivalent or higher habitat value than non-native grasslands for non-native grassland impacts, with value determined consistent with the Subarea Plan tier system (see Subarea Plan Table 5-3). The applicant is required to provide the City with verification of mitigation credit purchase prior to issuance of any grading permit, including clearing, grubbing, grading, and construction permit.

MM BIO-2: Burrowing Owl Take Avoidance Surveys. Take avoidance surveys are intended to detect the presence of burrowing owls on a project site at a fixed period in time and inform necessary take avoidance actions. Take avoidance surveys may detect changes in owl presence, such as colonizing owls that have recently moved onto the site, migrating owls, resident burrowing owls changing burrow use, or young of the year that are still present and have not dispersed (CDFG 2012). Prior to issuance of any land development permits, including clearing, grubbing, and grading permits, the Proposed Project applicant or its designee shall retain a qualified biologist to conduct take avoidance surveys for burrowing owls. The take avoidance survey(s) can be conducted between 14 days and 24 hours prior to initiating ground disturbance activities; however, time lapses between project activities may require subsequent surveys within 24 hours prior to ground disturbance. The development of avoidance and minimization approaches would be informed by monitoring the burrowing owls.

MM BIO-3: Avoidance of Nesting Bird Impacts: To avoid any direct impacts on any species identified as a candidate, sensitive, or special status species in the HLIT, MSCP Subregional Plan, or other local or regional plans, policies, or regulations, or by the CDFW or USFWS, removal of habitat that supports active nests in the proposed project study area should occur outside of the breeding season of these species (February 1 to September 15), where feasible. If removal of habitat must occur during the nesting season, a qualified biologist shall conduct a pre-construction survey to determine the presence or absence of nesting birds within the proposed area of disturbance. The pre-construction survey shall be conducted no more than 72 hours prior to the start of construction activities (including removal of vegetation). If more than 72 hours lapse between the original survey and construction activities that include vegetation removal on all or a portion of the site, a new survey(s) shall be conducted. If nesting birds are detected, a letter report or mitigation plan in conformance with the HLIT and applicable state and federal law (e.g., appropriate follow-up surveys, monitoring schedules, and construction barriers/buffers) shall be prepared and include proposed measures to be implemented to ensure that take of birds or eggs is avoided. The report or mitigation plan shall be submitted to the City for review and approval and implemented to the satisfaction of the City.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Disturb any human remains, including those interred outside of formally dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments:

The Archaeological Resources Survey Report for the Shinohara Industrial Project, 517 Shinohara Lane, Chula Vista, San Diego County, California, prepared by Red Tail Environmental, July 2021 (Appendix E), includes a cultural and historical resources study and archaeological investigation within the project area. The main goal of the archaeological investigations was to gather and analyze the information needed to determine if the project would impact cultural resources.

- a) **No impact.** As defined by CEQA, no historic resources are present within the project area, and project implementation will not cause an adverse change to a historical resource (page 26 Archaeological Resources Survey Report (Appendix E)). Therefore, the project will have **no impact** or cause a substantial adverse change in the significance of a historical resource, directly, indirectly, or cumulatively.
- b) **No impact.** The study was negative for cultural resources. No archaeological resources were identified within the project area during the survey. Archival research indicated that no previously recorded resources were present within the project area. Research of historic topographic maps and aerial imagery also indicated that the parcel had not been previously developed. However, it appears to have been graded and highly disturbed. Due to the lack of archaeological resources and indicators of intact subsurface deposits observed during the survey effort, the previous grading within the project area, and the negative Sacred Lands File search, no further archaeological work is recommended (page 26 Archaeological Resources Survey Report (Appendix E)). Therefore, the project will have **no impact** on causing a substantial adverse change on a significant archaeological resource. See Section XVIII – Tribal Cultural Resources for impacts on tribal cultural resources.
- c) **Less than significant.** No cemeteries or human remains are known to occur on-site. Pursuant to Public Resources Code §5097.98 and Health and Safety Code §7050.5, in the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery, the following steps shall be taken:
 - (1) There shall be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlie adjacent human remains until:
 - (A) The coroner of the county in which the remains are discovered must be contacted to determine that no investigation of the cause of death is required, and
 - (B) If the coroner determines the remains to be Native American:
 - 1. The coroner shall contact the Native American Heritage Commission within 24 hours.
 - 2. The Native American Heritage Commission shall identify the person or persons it believes to be the most likely descended from the deceased Native American.

3. The most likely descendent may make recommendations to the landowner or the person responsible for the excavation work, for means of treating or disposing of, with appropriate dignity, the human remains, and any associated grave goods as provided in Public Resources Code Section 5097.98, or
- (2) Where the following conditions occur, the landowner or his authorized representative shall rebury the Native American human remains and associated grave goods with appropriate dignity on the property in a location not subject to further subsurface disturbance.
 - (A) The Native American Heritage Commission is unable to identify a most likely descendent, or the most likely descendent failed to make a recommendation within 24 hours after being notified by the commission.
 - (B) The descendant identified fails to make a recommendation; or
 - (C) The landowner or his authorized representative rejects the recommendation of the descendant, and the mediation by the Native American Heritage Commission fails to provide measures acceptable to the landowner.

Following the requirements of Public Resources Code §5097.98 and Health and Safety Code §7050.5 will ensure that if human remains are discovered, they will be handled appropriately. Therefore, the project will have a **less than significant impact** on human remains.

Mitigation: No mitigation measures are required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VI.ENERGY -- Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments:

Shinohara Industrial Center Project – CEQA Energy Review, 517 Shinohara Lane City of Chula Vista, CA, prepared by MD Acoustics LLC, May 17, 2022 (Appendix F), determined the project would not potentially cause a significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation.

a) Less than significant impact.

Construction Energy Demand

The construction schedule is anticipated to begin no earlier than early March 2022, be completed by mid-April 2023, and be completed in one phase.⁹ Staging of construction vehicles and equipment will occur on-site.

⁹ Per the project applicant, the project is to be operational in September 2022. Therefore, the estimated construction timeline was generated based on CalEEMod default construction timelines for each phase of construction and a completion date of September 2022.

Construction Equipment Electricity Usage Estimates

SDG&E will provide electrical service. This section focuses on the energy implications of the construction process, specifically the power cost from on-site electricity consumption during the proposed project's construction. Based on the 2017 National Construction Estimator, Richard Pray (2017)¹⁰, the typical power cost per 1,000 square feet of building construction per month is estimated to be \$2.32. The project plans to develop the site with a 168,926 square foot warehouse/distribution space, with 4,506 square feet of office space and 4,724 square feet of mezzanine space over approximately 13.5 months. Based on Table 3, the total power cost of the on-site electricity usage during the proposed project construction is estimated to be approximately \$5,579.97. Furthermore, SDG&E's service rate schedule is approximately \$0.24 per kWh of electricity for the proposed industrial project.¹¹ As shown in Table 3, the total electricity usage from project construction-related activities is estimated to be approximately 23,544 kWh.

Table 3: Project Construction Power Cost and Electricity Usage			
Power Cost (per 1,000 square foot of building per month of construction)	Total Building Size (1,000 Square Foot)	Construction Duration (months)	Total Project Construction Power Cost
\$2.32	178.160	13.5	\$5,579.97

Cost per kWh	Total Project Construction Electricity Usage (kWh)
\$0.24	23,544
*Assumes the project will be under Schedule TOU-A rate under SDG&E and, to be conservative, uses the lower anticipated cost per kWh. Source: https://www.sdge.com/sites/default/files/regulatory/3-1-21%20Small%20Commercial%20Total%20Rates%20Table.pdf	

Construction Equipment Fuel Estimates

Fuel consumed by construction equipment would be the primary energy resource expended for project construction. Fuel consumed by construction equipment was evaluated with the following assumptions:

- Construction schedule of approximately 13.5 months
- All construction equipment was assumed to run on diesel fuel
- Typical daily use of 8 hours, with some equipment operating from ~6-7 hours
- Aggregate fuel consumption rate for all equipment was estimated at 18.5 bhp-hr/day (from CARB's 2017 Emissions Factors Tables and fuel consumption rate factors as shown in Table D-21 of the Moyer Guidelines:https://www.arb.ca.gov/msprog/moyer/guidelines/2017gl/2017_gl_appendix_d.pdf).
- Diesel fuel would be the responsibility of the equipment operators/contractors and would be sourced within the region.
- Project construction represents a "single-event" for diesel fuel demand and would not require an ongoing or permanent commitment of diesel fuel resources during long-term operation.

Using the CalEEMod data input from the Air Quality, Greenhouse Gas, and Health Risk Impact Study (Appendix C¹²), the project's construction phase would consume electricity and fossil fuels as a single energy demand. Once construction is completed, their use is completed would cease. CARB's 2017 Emissions Factors Tables show that aggregate fuel consumption (gasoline and diesel fuel) would be approximately 18.5 bhp-hr-gal. Table 4 shows the results of the analysis of construction equipment.

¹⁰ Pray, Richard. 2017 National Construction Estimator. Carlsbad : Craftsman Book Company, 2017.

¹¹ Assumes the project will be under Schedule TOU-A rate under SDG&E and, to be conservative, uses the lower anticipated cost per kWh. Source: <https://www.sdge.com/sites/default/files/regulatory/3-1-21%20Small%20Commercial%20Total%20Rates%20Table.pdf>

¹² Shinohara Industrial Center Project – Evaluation of Changes to Air Quality, Greenhouse Gas, and Energy Impact, City of Chula Vista, CA, prepared by MD Acoustics LLC, March 23, 2022

Table 4: Construction Equipment Fuel Consumption Estimates								
Phase	Number of Days	Offroad Equipment Type	Amount	Usage Hours	Horse power	Load Factor	HP hrs/day	Total Fuel Consumption (gal diesel fuel) ¹
Grading	20	Graders	1	8	187	0.41	613	663
	20	Excavators	1	8	158	0.38	480	519
	20	Rubber Tired Dozers	1	8	247	0.4	790	854
	20	Tractors/Loaders/Backhoes	3	8	97	0.37	861	931
Building Construction	230	Cranes	1	7	231	0.29	469	5,830
	230	Forklifts	3	8	89	0.2	427	5,311
	230	Generator Sets	1	8	84	0.74	497	6,182
	230	Tractors/Loaders/Backhoes	3	7	97	0.37	754	9,370
	230	Welders	1	8	46	0.45	166	2,059
Paving	20	Pavers	2	8	130	0.42	874	944
	20	Paving Equipment	2	8	132	0.36	760	822
	20	Rollers	2	8	80	0.38	486	526
Architectural Coating	20	Air-Compressors	1	6	78	0.48	225	243
CONSTRUCTION FUEL DEMAND (gallons of diesel fuel)								34,256
Notes: ¹ Using Carl Moyer Guidelines Table D-21 Fuel consumption rate factors (bhp-hr/gal) for engines less than 750 hp. (Source: https://www.arb.ca.gov/msprog/moyer/guidelines/2017gl/2017_gl_appendix_d.pdf)								

As presented in Table 4, project construction activities would consume an estimated 34,256 gallons of diesel fuel. Project construction would represent a “single-event” diesel fuel demand and would not require an ongoing or permanent commitment of diesel fuel resources for this purpose.

Construction Worker Fuel Estimates

It is assumed that all construction worker trips are from light-duty autos (LDA) along area roadways. With respect to estimated VMT, the construction worker trips would generate an estimated 460,296 VMT. Data regarding project-related construction worker trips were based on CalEEMod 2020.4.0 model defaults.

Vehicle fuel efficiencies for construction workers were estimated in the Air Quality, Greenhouse Gas, and Health Risk Impact Study (Appendix C) using information generated from CARB’s EMFAC model (see Appendix A of the Energy Review (Appendix F) for details). The aggregate fuel efficiency of 31.67 miles per gallon (mpg) was used to calculate vehicle miles traveled for construction worker trips. Table 5 shows that an estimated 12,730 gallons of fuel would be consumed for construction worker trips.

Table 5: Construction Worker Fuel Consumption Estimates						
Phase	Number of Days	Worker Trips/Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Grading	20	15	10.8	3,240	31.67	102
Building Construction	230	157	10.8	389,988	31.67	12,314
Paving	20	15	10.8	3,240	31.67	102
Architectural Coating	20	31	10.8	6,696	31.67	211
Total Construction Worker Fuel Consumption						12,730
Notes: ¹ Assumption for the worker trip length and vehicle miles traveled are consistent with CalEEMod 2020.4.0 defaults.						

Construction Vendor/Hauling Fuel Estimates

Tables 6 and 7 show the estimated fuel consumption for vendor and hauling during building construction and architectural coating. With respect to estimated VMT, the vendor and hauling trips would generate

an estimated 114,919 VMT. Data regarding project-related construction worker trips were based on CalEEMod 2020.4.0 model defaults.

For the architectural coatings, it is assumed that the contractors would be responsible for bringing coatings and equipment with them in their light-duty vehicles. Therefore, vendors delivering construction material or hauling debris from the site during grading would use medium to heavy-duty vehicles with an average fuel consumption of 8.4 mpg for medium heavy-duty trucks and 6.41 mpg for heavy heavy-duty trucks (see Appendix A of the Energy Review (Appendix F) for details). Tables 6 and 7 show that an estimated 14,143 gallons of fuel would be consumed for vendor and hauling trips

Table 6: Construction Vendor Fuel Consumption Estimates (MHD Trucks)¹						
Phase	Number of Days	Vendor Trips/Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Grading	20	0	7.3	0	8.40	0
Building Construction	230	61	7.3	102,419	8.40	12,193
Paving	20	0	7.3	0	8.40	0
Architectural Coating	20	0	7.3	0	8.40	0
Total Construction Worker Fuel Consumption						12,193
Notes:						
¹ The assumptions for the vendor trip length and vehicle miles traveled are consistent with CalEEMod 2020.4.0 defaults.						

Table 7: Construction Hauling Fuel Consumption Estimates (HHD Trucks)¹						
Phase	Number of Days	Hauling Trips/Day	Trip Length (miles)	Vehicle Miles Traveled	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
Grading	20	31,250	20	12,500	6.41	1,9500
Building Construction	230	0	20	0	6.41	0
Paving	20	0	20	0	6.41	0
Architectural Coating	30	0	20	0	6.41	0
Total Construction Worker Fuel Consumption						1,950
Notes:						
¹ Assumption for the hauling trip length and vehicle miles traveled are consistent with CalEEMod 2020.4.0 defaults.						

Construction Energy Efficiency/Conservation Measures

Construction equipment used over the 13.5-month construction phase would conform to CARB regulations and California emissions standards and evidence of related fuel efficiencies. Construction of the proposed industrial development would require the typical use of energy resources. There are no unusual project characteristics or construction processes that would require the use of equipment that would be more energy-intensive than is used for comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies). Equipment employed in the project's construction would not result in inefficient, wasteful, or unnecessary fuel consumption.

CARB has adopted the Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling to reduce public exposure to diesel particulate matter and other Toxic Air Contaminants. Additionally, as required by the California Code of Regulations Title 13, Motor Vehicles, section 2449(d)(3) Idling, the idling times of construction vehicles are limited to no more than five minutes; thereby minimizing or eliminating unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Enforcement of idling limitations is realized through periodic site inspections conducted by City building officials and/or in response to citizen complaints. Compliance with these measures would result in more efficient use of construction-related energy and minimize or eliminate wasteful or unnecessary energy consumption. Idling restrictions and newer engines and equipment would result in less fuel combustion and energy consumption.

Furthermore, the project has been designed in compliance with California's Energy Efficiency Standards and 2019 CALGreen Standards. These measures include but are not limited to water-conserving plumbing, LED lighting, and water-efficient irrigation systems.

Operation Energy Demand

Energy consumption in project operations would include transportation energy demands (energy consumed by employee and patron vehicles accessing the project site) and facilities energy demands (energy consumed by building operations and site maintenance activities).

Transportation Fuel Consumption

The largest source of operational energy use would be the vehicle operation of employees and truck trips. The site is located in an urbanized area at 517 Shinohara Lane, just east of the 805 Freeway. Furthermore, there are existing transit services provided by the San Diego Metropolitan Transit System (SDMTS), approximately a 0.09-mile walking distance of the proposed project site. The nearest transit service is SDMTS Routes 703 and 704, with a stop along Auto Park Drive and Oleander Avenue.

Using the CalEEMod output from the Air Quality, Greenhouse Gas, and Health Risk Impact Study (Appendix C), an average trip for autos and light trucks was 9.5 miles, and 3- 4-axle trucks were assumed to travel an average of 7.3 miles¹³. It was assumed that vehicles would operate 365 days per year to be conservative. Table 8 shows all vehicles' estimated annual fuel consumption, from autos to heavy-heavy trucks.¹⁴ The proposed distribution project would generate approximately 4,881 trips per day. The vehicle fleet mix was used from the CalEEMod output from the Air Quality, Greenhouse Gas, and Health Risk Impact Study (Appendix C). Table 8 shows that an estimated 584,169 gallons of fuel would be consumed per year to operate the proposed project.

Vehicle Type	Vehicle Mix	Number of Vehicles ²	Average Trip (miles) ¹	Daily VMT	Average Fuel Economy (mpg)	Total Gallons per Day	Total Annual Fuel Consumption (gallons)
Light Auto	Automobile	2,677	9.5	25,432	32.12	791.77	288,994
Light Truck	Automobile	46	9.5	437	26.41	16.55	6,040
Light Truck	Automobile	895	9.5	8,503	26.62	319.40	116,582
Medium Truck	Automobile	598	9.5	5,681	20.43	278.07	101,496
Light Heavy Truck	2-Axle Truck	121	9.5	1,150	11.46	100.31	36,611
Light Heavy Truck 10,000 lbs +	2-Axle Truck	30	9.5	285	11.86	24.03	8,771
Medium Heavy Truck	3-Axle Truck	42	7.3	307	8.39	36.54	13,338
Heavy Heavy Truck	4-Axle Truck	30	7.3	219	6.48	33.80	12,336
Total		4,881	--	42,012	17.97	1600.46	--
Total Annual Fuel Consumption							584,169
Notes:							
¹ Based on the size of the site and relative location, trips were assumed to be local rather than regional.							
² Based on the distribution use.							

Trip generation and VMT generated by the project are consistent with similar warehouse/distribution uses of similar scale and configuration as reflected in the (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region (April 2002). The project does not propose uses or operations that would inherently result in excessive and wasteful vehicle trips and VMT, nor associated excess and wasteful vehicle energy consumption. Furthermore, California consumed approximately 4.2 billion gallons of diesel and 15.1 billion gallons of gasoline in 2015.¹⁵¹⁶ Therefore, the increase in fuel consumption from the project is insignificant compared to the state's demand. Therefore, project

¹³ CalEEMod default distance for H-W (home-work) or C-W (commercial-work) is 9.5 miles; 7.3 miles for H-O (home-other) or C-O (commercial-other).

¹⁴ Average fuel economy based on aggregate mileage calculated in EMFAC 2017 for opening year (2022). See Appendix A for EMFAC output.

¹⁵ <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-gasoline-data-facts-and-statistics>

¹⁶ <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/diesel-fuel-data-facts-and-statistics>

transportation energy consumption **would not be considered inefficient, wasteful, or otherwise unnecessary.**

Facility Energy Demands (Electricity and Natural Gas)

Building operation and site maintenance (including landscape maintenance) would result in the consumption of electricity and natural gas (provided by SDG&E). The project's operation would involve energy for heating, cooling, and equipment operation. These facilities would comply with all applicable California Energy Efficiency Standards and 2019 CALGreen Standards.

The annual natural gas and electricity demands were provided per the CalEEMod output from the Air Quality, Greenhouse Gas, and Health Risk Impact Study (Appendix C) in Table 9.

Table 9: Project Annual Operational Energy Demand Summary ¹	
Natural Gas Demand	kBTU/year
Unrefrigerated Warehouse - No Rail	293,957
Total	293,957

Electricity Demand	kWh/year
Unrefrigerated Warehouse - No Rail	632,454
Parking Lot	30,940
Total	663,394

Notes:
¹ Taken from the CalEEMod 2020.4.0 annual output in the Shinohara Industrial Project Air Quality, Greenhouse Gas, Health Risk Impact Study (Appendix C).

As shown in Table 9, the estimated electricity demand for the project is approximately 663,394 kWh per year. In 2020, the non-residential sector of the County of San Diego consumed approximately 11,658 million kWh of electricity.¹⁷ In addition, the estimated natural gas consumption for the project is approximately 293,957 kBTU per year. In 2020, the non-residential sector of the County of San Diego consumed approximately 202 million therms of gas.¹⁸ Therefore, the project's increase in electricity and natural gas demand is insignificant compared to the County's 2020 non-residential sector demand.

Energy use in buildings is divided into energy consumed by the built environment and energy consumed by uses that are independent of the construction of the building, such as plug-in appliances. In California, the California Building Standards Code Title 24 governs energy consumed by the built environment, mechanical systems, and some types of fixed lighting. Non-building energy use or "plug-in" energy use can be subdivided by specific end-use (refrigeration, cooking, appliances, etc.).

Furthermore, the project energy demands would be comparable to other industrial projects of similar scale and configuration. Therefore, the project facilities' energy demands, and consumption **would not be considered inefficient, wasteful, or otherwise unnecessary.**

As supported by the preceding analyses, neither construction nor operation of the project would result in wasteful, inefficient, or unnecessary energy consumption or wasteful use of energy resources. The project does not include any unusual project characteristics or construction processes that would require the use of equipment that would be more energy-intensive than is used for similar activities and is an industrial project that is not proposing any additional features that would require a larger energy demand than other industrial projects of similar scale and configuration. As the project is consistent with the existing General Plan land use designation, the energy demands of the project are anticipated to be accommodated within the context of available resources and energy delivery systems. Therefore, the project would not cause or result in the need for additional energy-producing or transmission facilities. The project would not engage in wasteful or inefficient uses of energy and aims to achieve energy conservation goals within California. Therefore, the project would have a **less than significant impact.**

¹⁷ California Energy Commission, Electricity Consumption by County. <https://ecdms.energy.ca.gov/elecbycounty.aspx>

¹⁸ California Energy Commission, Gas Consumption by County. <http://ecdms.energy.ca.gov/gasbycounty.aspx>

b) No impact.

Regarding federal transportation regulations, the project site is located in a developed area. Access to/from the project site is from the existing roads of Shinohara Lane and Brandywine Avenue. These roads are existing, so the project would not interfere with nor otherwise obstruct intermodal transportation plans or projects that may be proposed pursuant to the ISTEA because SANDAG is not planning for intermodal facilities in the project area.

Regarding the State's Energy Plan and compliance with Title 24 CCR energy efficiency standards, the applicant must comply with the California Green Building Standard Code requirements for energy-efficient buildings and appliances and utility energy efficiency programs implemented by SDG&E.

Regarding the State's Renewable Energy Portfolio Standards, the project would be required to meet or exceed the energy standards established in the California Green Building Standards Code, Title 24, Part 11 (CALGreen). CalGreen Standards require that new buildings reduce water consumption, employ building commissioning to increase building system efficiencies, divert construction waste from landfills, use LED lighting, and install low pollutant-emitting finish materials.

As shown in the Air Quality, Greenhouse Gas, and Health Risk Impact Study (Appendix C) – Section 7.3 – Greenhouse Gas Plan Consistency, the project is also consistent with the reduction strategies of the City of Chula Vista Climate Action Plan (CAP).

Therefore, the project **will not** conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Mitigation: No mitigation measures are required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS -- Would the project:				
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 .	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments:

The Geotechnical Investigation Shinohara Industrial Building 517 Shinohara Lane Industrial Building Chula Vista, California, prepared by Geocon Incorporated, July 28, 2021 (Appendix G), found no soil or geologic conditions that would preclude the development of the property as presently proposed, provided that the recommendations of the report are followed (page 8).

a)

- i) **Less than significant impact.** A review of the referenced geologic materials And Geocon's knowledge of the general area indicates that the site is not underlain by active, potentially active, or inactive faults. However, a strand of the potentially active La Nacion Fault is mapped approximately 400 feet east of the site. An active fault is defined by the California Geological Survey (CGS) as a fault showing evidence of activity within the last 11,700 years. The closest active fault is the Newport Inglewood-Rose Canyon Fault zone, located approximately eight miles west of the site. The site is not located within a State of California Earthquake Fault Zone (pages 4 -5 Geotechnical Investigation (Appendix G)).

Considerations important in seismic design include the frequency and duration of motion and the soil conditions underlying the site. The seismic design of structures should be evaluated in accordance with the California Building Code (CBC) guidelines currently adopted by the local agency (page 6 Geotechnical Investigation (Appendix G)).

Surface Ground Rupture

Surface ground rupture associated with ground shaking represents primary or direct seismic hazards to structures. The risk associated with ground rupture hazard is low due to the absence of active faults at the subject site (page 6 Geotechnical Investigation (Appendix G)).

Compliance with the Geotechnical Investigation Report (Appendix G) and the California Building Code will ensure risks will be minimal associated with primary surface ground rupture and ground shaking. The project will have a **less than significant effect** directly or indirectly.

- ii) **Less than significant impact.** See Section VII a) i) above.
- iii) **No impact.** Seismic disturbances, when compounded with liquefaction, can be very destructive. Liquefaction is when strong earthquake shaking causes sediment layers saturated with groundwater to lose strength and behave as a fluid. This sub-surface process can lead to near-surface or surface

ground failure resulting in property damage and structural failure. If surface ground failure does occur, it is usually expressed as lateral spreading, flow failures, ground oscillation, and/or general loss of bearing strength. Sand boils (injections of fluidized sediment) can commonly accompany these different types of failure.

As noted in Section VII a) i) above, there are no known active faults in the project site area. A review of Figure 9-7 – Geologic Hazards of the General Plan Chula Vista Vision 2020 (page E-55) indicates that the property is not within a liquefaction area. According to the Geotechnical Investigation Report (Appendix G) (page 7), due to the lack of a permanent, near-surface groundwater table and the dense nature of the underlying geologic units on the property, liquefaction potential for the site is considered very low.

Given the Geotechnical Investigation (Appendix G) findings, implementing existing state and local laws and regulations concerning soil liquefaction and ground failure will ensure the project will have **no impact** related to liquefaction and ground failure directly, indirectly, or cumulatively.

- iv) **Less than significant.** A review of Figure 9-7 – Geologic Hazards of the General Plan Chula Vista Vision 2020 (page E-55) found that the project site was not in a landslide hazard area or an area of steep slopes. The project will include cuts and fills estimated to be up to 50 feet, with new slopes approximately ten feet in height. Retaining walls will be required along the site's perimeter to reach the pad grade. Retaining walls are proposed to include soil nail walls and mechanically stabilized earth (MSE) walls.

The Geotechnical Investigation did not observe evidence of previous or incipient slope instability at the site during the study. Published geologic mapping indicates landslides are not present on or immediately adjacent to the site (page 7 Geotechnical Investigation Report (Appendix G)).

Impacts related to landsliding and slope failure would be **less than significant**, directly, indirectly, or cumulatively through compliance with the Geotechnical Investigation and the California Building Code.

- b) **Less than significant.** Project construction would be subject to local and state codes and erosion control and grading requirements. Because construction activities would disturb one or more acres, the project must adhere to the NPDES Construction General Permit provisions. Construction activities subject to this permit include clearing, grading, and other soil disturbances, such as stockpiling and excavating. The NPDES Construction General Permit requires implementing a Storm Water Pollution Prevent Plan (SWPPP), including temporary project construction features (i.e., BMPs) designed to prevent erosion and protect the quality of stormwater runoff. Sediment-control BMPs may include stabilized construction entrances, straw wattles on earthen embankments, sediment filters on existing inlets, or the equivalent.

In addition, grading activities would be required to conform to the most current version of the California Building Code, the City Code, the approved grading plans, and BMP's engineering practices. The project must also comply with San Diego Air Pollution Control District Rules 50 (Visible Emissions), 51 (Nuisance), and 55 (Fugitive Dust), as noted under Section III – Air Quality and on page 9 of the Air Quality, Greenhouse Gas, and Health Risk Impact Study (Appendix C). Compliance with these federal, regional, and local requirements would reduce the potential for both on-site and off-site erosion effects to accepted levels during project construction.

Upon completion of construction activities, ground surfaces would be stabilized by project structures, paving, and landscaping. Therefore, impacts associated with soil erosion and the loss of topsoil would be **less than significant**, directly, indirectly, or cumulatively.

c) **Less than significant.**

Landslides

A landslide is a movement of surface material down a slope. As noted in Section VII a) iv) above, impacts related to landsliding and slope failure would be **less than significant**, directly, indirectly, or cumulatively through compliance with the Geotechnical Investigation and the California Building Code.

Lateral Spreading

Lateral spread refers to landslides that commonly form on gentle slopes with rapid fluid-like flow movement, like water. Per the Geotechnical Investigation (Appendix G), the proposed structures or facilities are expected to withstand predicted ground softening and/or vertical and lateral ground spreading/displacements to an acceptable level of risk. However, due to the height of the mechanically stabilized earth (MSE) walls, some settlement/lateral wall movement will occur. The movement could result in cracking in flatwork and pavement placed within the reinforced and retained zones of the wall. Buildings or other improvements planned near the top of a slope steeper than 3:1 could also experience this type of damage. Therefore, the Geotechnical Investigation lays out recommendations to limit the risk of lateral spreading. Adherence to the recommendations of the Geotechnical Investigation (Appendix G) and the California Building Code will ensure that lateral spreading risks are **less than significant**, directly, indirectly, and cumulatively.

Subsidence

Subsidence is the sinking of the land surface. Evidence of subsidence includes ground cracking and damage to roadways, aqueducts, and structures. Subsidence caused by excessive groundwater pumping is a common occurrence in areas of California where groundwater is pumped for agricultural and municipal wells. Some shrinkage and subsidence are expected during the project grading activities as the pad is prepared for the project. Adherence to the recommendations of the Geotechnical Investigation (Appendix G) will ensure that the project site meets all City Code requirements, and the effect of subsidence will be **less than significant**, directly, indirectly, and cumulatively.

Liquefaction

Liquefaction is when strong earthquake shaking causes sediment layers saturated with groundwater to lose strength and behave as a fluid. This sub-surface process can lead to near-surface or surface ground failure resulting in property damage and structural failure. If surface ground failure does occur, it is usually expressed as lateral spreading, flow failures, ground oscillation, and/or general loss of bearing strength. Sand boils (injections of fluidized sediment) can commonly accompany these different types of failure.

As noted in Response VII a) iii) above, Figure 9-7 – Geologic Hazards of the General Plan Chula Vista Vision 2020 (page E-55) indicates that the property is not within a liquefaction area, and the project will have **no impact** related to liquefaction.

Collapsible Soils

Collapsible Soils are low-density, silty to very fine-grained, predominantly granular soils containing minute pores and voids. When saturated, these soils undergo a rearrangement of their grains and a loss of cementation, causing substantial, rapid settlement under even relatively light loads. A rise in the groundwater table or an increase in surface water infiltration, combined with the weight of a building or structure, can cause rapid settlement and consequent cracking of foundations and walls. Collapsible soils generally result from rapid deposition close to the source of the sediment where the materials have not been sufficiently moistened to form a compact soil.

Soils encountered at the site are underlain by Tertiary San Diego Formation capped with Very Old Parallic Deposits, terrace deposits, alluvium, topsoil, previously placed fill, and undocumented fill. Adherence to the recommendations of the Geotechnical Investigation (Appendix G) will ensure that the project site meets all City Code requirements, and the effect of project grading will be **less than significant**, directly, indirectly, and cumulatively.

d) Less than significant.

Expansive soils contain certain types of clay minerals that shrink or swell as the moisture content changes; the shrinking or swelling can shift, crack, or break structures built on such soils. Arid or semi-arid areas with seasonal soil moisture changes experience a much higher frequency of problems from expansive soils than areas with higher rainfall and more constant soil moisture.

Table 18-1 -B of the Uniform Building code read as follows:

TABLE 18-1-B – CLASSIFICATION OF EXPANSIVE SOILS	
EXPANSION INDEX	POTENTIAL EXPANSION
0 – 20	Very Low
21 – 50	Low
51 – 90	Medium
91 – 130	High
Above 130	Very High

The California Building Code (CBC) 2016, Volume 2, Chapter 18, Division 1 Section 1803.2 mandates that special foundation design consideration is employed if the soil expansion Index is 20 or greater in accordance with Table 18-1-B. The methodology and scope for a geotechnical investigation are described in UBC Section 1803 and require an assessment of various factors, such as slope stability, soil strength, load-bearing soils' adequacy, compressible or expansive presence soils, and the liquefaction potential. The required content of the geotechnical report includes recommendations for foundation type and design criteria. These recommendations can include foundation design provisions intended to mitigate the effects of expansive soils, liquefaction, and differential settlement. In general, mitigation can be accomplished by combining ground modification techniques (i.e., stone columns, reinforcing nails and anchors, deep soil mixing, etc.), selecting an appropriate foundation type and configuration, and using appropriate building/structural foundation systems. Section 1804.5 Excavation, Grading, and Fill require preparing a geotechnical report where a building will be constructed on compacted fill.

The International Building Code (IBC) replaced earlier regional building codes (including the Uniform Building Code) in 2000 and established consistent construction guidelines for the nation. In 2006, the IBC was incorporated into the 2007 California Building Code (CBC) and currently applies to all structures being constructed in California. Therefore, the national model codes are incorporated by reference into the building codes of local municipalities. The CBC includes building design and construction criteria that consider the state's seismic conditions.

The soil encountered in the field investigation is considered to be both “non-expansive” (expansion index [EI] of 20 and less) and “expansive” (EI greater than 20) as defined by the 2019 California Building Code (CBC) Section 1803.5.3. It is expected that the majority of the soils that will be encountered in remedial grading and cut areas will have “low” expansion potential. Portions of the topsoil possess a “medium” to “high” expansion potential (EI of 51 or greater) Geotechnical Investigation (Appendix G, page 9).

By adhering to state and local seismic and structural regulations (i.e., California Seismic Hazards Mapping Act, California Building Code, and Chula Vista Municipal Code), the impacts of expansive soils will be **less than significant** directly, indirectly, or cumulatively.

- e) **No impact.** Not applicable as the City of Chula Vista provides sewer to the project area, and the project must connect to the sewer. **No impact.**

- f) **Less than significant with mitigation.** The Paleontological Resources Inventory Report, prepared by Dudek, on July 11, 2022 (Appendix H), found that with the implementation of mitigation measures, project-related impacts on paleontological resources will be reduced to a level that is less than significant with mitigation.

Per CEQA guidelines, Dudek performed a paleontological resources inventory project site. The inventory consisted of a San Diego Natural History Museum (SDNHM) records search, review of geological mapping and geological and paleontological literature, and intensive pedestrian surveys of the project site. The results of the paleontological records search were negative for paleontological resources within the project site; however, the SDNHM reported fossil localities nearby from the same geological units that underlie the project site. Fragmentary, fossilized exoskeletal remains were documented during the supplemental pedestrian survey (Figures 3 – 5 of the Paleontological Resources Inventory Report (Appendix H)). N. Scott Rugh, an expert in invertebrate fossil identification, identified the exoskeletal material as likely belonging to the crab, *Randallia* sp. (Rugh. Pers. Comm. 2020) (Paleontological Resources Inventory Report page 1(Appendix H)).

As the project site has never been developed, there is a potential to encounter intact subsurface paleontological resources. As such, a paleontological monitoring program, which includes the preparation and implementation of a Paleontological Resources Impact Mitigation Program (PRIMP), is necessary to reduce impacts on any potential paleontological resources onsite.

Implementation of the following mitigation measures will reduce any project-related impacts on paleontological resources to a level that is **less than significant** (pages 7 - 9 Paleontological Resources Inventory Report (Appendix H)).

Mitigation:

MM PAL-1: Prior to the issuance of grading permits, the Permittee/Owner shall provide written confirmation to the City that a qualified paleontologist has prepared a Paleontological Resources Impact Mitigation Program (PRIMP) and has been retained to carry out the PRIMP. A qualified paleontologist is defined as an individual with an MS or Ph.D. in paleontology or geology who is familiar with paleontological procedures and techniques and has expertise in local geology, stratigraphy, and biostratigraphy. The PRIMP shall be consistent with the Society of Vertebrate Paleontology (SVP) (2010) guidelines and contain the following components:

- Introduction to the project, including project location, description of grading activities that potentially may impact paleontological resources, and underlying geologic units.
- Description of the relevant laws, ordinances, regulations, and standards pertinent to the project and potential paleontological resources.
- Requirements for the qualified paleontologist to attend the pre-construction meeting and provide worker environmental awareness training at the pre-construction meeting and at the job site the day grading is to be initiated. In addition, the qualified paleontologist shall inform the grading contractor and City Engineer of the paleontological monitoring program methodologies.
- Identification of where paleontological monitoring of excavations impacting the San Diego Formation, Very Old Paralic Deposits , and Old Alluvial Floodplain Deposits are required within the project site based on construction plans and/or geotechnical reports.

- Procedures for adequate paleontological monitoring (including necessary monitoring equipment), methods for treating fossil discoveries, fossil recovery procedures, and sediment sampling for microvertebrate fossils, including the following requirements:
 - A paleontological monitor shall be on-site at all times during the original cutting of previously undisturbed sediments of moderately to highly sensitive geologic units (e.g., San Diego Formation, very old paralic deposits, and old alluvial floodplain deposits) to inspect cuts for contained fossils. (A paleontological monitor is defined as an individual who has experience collecting and salvaging fossil materials.) The paleontological monitor shall work under the direction of a qualified paleontologist. Monitoring is not required during excavation within low resource sensitivity geological units (e.g., young alluvial flood-plain deposits) if determined to be present within the project site.
 - Paleontological monitoring is not required in areas underlain by artificial fill unless grading activities are anticipated to extend beneath the veneer of the fill and impact underlying geological units with moderate to high paleontological sensitivity (e.g., San Diego Formation, Very Old Paralic Deposits, and/or Old Alluvial Floodplain Deposits).
 - If fossils are discovered, the qualified paleontologist and/or paleontological monitor shall recover them. The paleontologist (or paleontological monitor) shall be allowed to temporarily direct, divert, or halt grading within 50 feet of the resource to allow recovery of fossil remains. Because of the potential for the recovery of small fossil remains, it may be necessary in certain instances, and at the discretion of the qualified paleontologist, to set up a screen-washing operation on the project site. Alternatively, sediment samples can be collected and processed off-site.
- Paleontological reporting, and collections management:
 - Prepared fossils along with copies of all pertinent field notes, photos, maps, and the final paleontological monitoring report discussed below shall be deposited in a scientific institution with paleontological collections such as the San Diego Natural History Museum within 90 days of completion of monitoring unless the City and the qualified paleontologist determine the extent of fossils recovered will require more preparation, stabilization, and/or curatorial time. Any curation costs shall be paid for by the applicant.
 - A final paleontological monitoring report shall be completed. This report shall include discussions of the methods used, stratigraphy exposed, fossils collected, and significance of recovered fossils, and shall be submitted to the designated scientific institution within 90 days of the completion of monitoring unless the City and the qualified paleontologist determine the extent of fossils recovered will require more preparation, stabilization, and/or curatorial time.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS – Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Comments:

The Shinohara Industrial Center Project Air Quality, Greenhouse Gas, and Health Risk Impact Study City of Chula Vista, CA, prepared by MD Acoustics, LLC, May 17, 2022 (Appendix C)¹⁹, indicates the project will not result in greenhouse gas emissions, either directly or indirectly that may have a significant impact on the environment.

a) Less than significant impact.

Greenhouse Gas Thresholds of Significance

The City has adopted no Greenhouse (GHG) emission thresholds for land development projects. The City of Chula Vista Climate Action Plan does not establish GHG emission thresholds. The San Diego Air Pollution Control District (SDAPCD) is considered the most appropriate agency with special knowledge in the subject area as the City is located within the SDAPCD jurisdiction. However, the SDAPCD has not issued guidance for assessing GHG impacts from land use development projects. In the absence of a threshold of significance for GHG emissions and as has been done with previous projects in the City, the project is evaluated based on the recommendation from the next closest air district, the South Coast AQMD.

This analysis follows guidance from the South Coast AQMD's Interim CEQA GHG Significance Thresholds (SCAQMD 2008). South Coast AQMD's thresholds are a tiered approach; projects may be determined to be less than significant under each tier or require further analysis under subsequent tiers. As identified in the Working Group meeting in September 2010, the five tiers are:

- Tier 1 evaluates whether or not the project qualifies for any applicable exemption under CEQA.
- Tier 2 determines whether or not the project is consistent with a greenhouse gas reduction plan. If a project is consistent with a qualifying local greenhouse gas reduction plan, it does not have significant greenhouse gas emissions.
- Tier 3 consists of screening values, which the lead agency can choose but must be consistent. A project's construction emissions are averaged over 30 years and are added to a project's operational emissions. If a project's emissions are under one of the following screening thresholds, then the project is less than significant:
 - All land-use types: 3,000 MTCO₂e per year
 - Based on land use types: residential is 3,500 MTCO₂e per year; commercial is 1,400 MTCO₂e per year, mixed-use is 3,000 MTCO₂e per year, and industrial is 10,000 MTCO₂e
- Tier 4 has the following options:
 - Option 1: Reduce emissions from business as usual by a certain percentage; this percentage is currently undefined
 - Option 2: Early implementation of applicable AB 32 Scoping Plan measures
 - Option 3: The year 2020 target for service populations (SP), which includes residents and employees: 4.8 MTCO₂e/SP/year for projects and 6.6 MTCO₂e/SP/year for plans;
 - Option 3, 2035 target: 3.0 MTCO₂e/SP/year for projects and 4.1 MTCO₂e/SP/year for plans
- Tier 5 involves mitigation offsets to achieve the target significance threshold.

¹⁹ Shinohara Industrial Center Project – Evaluation of Changes to Air Quality, Greenhouse Gas, and Energy Impact, City of Chula Vista, CA, prepared by MD Acoustics LLC, March 23, 2022

Tier 1 and Tier 2 thresholds are based on planning consistency. This approach, referred to in the CEQA Guidelines as “tiering,” allows agencies to rely on programmatic analysis of GHG emissions to determine that subsequent development consistent with the regional plan would result in incremental GHG emissions contribution representing a less than significant contribution to cumulative effects.

Tier 3 significance screening levels from SCAQMD guidance are based on the concept of establishing a 90 percent GHG emission market capture rate. A 90 percent emission capture rate means that 90 percent of total emissions from new development projects would be subject to CEQA analysis and mitigation. The market capture rate of 90 percent was developed to capture a substantial fraction of GHG emissions from new development projects while excluding small projects that will, in the aggregate, contribute a relatively small fraction of the cumulative statewide GHG emissions. This market capture rate approach is based on guidance from the CAPCOA report CEQA & Climate Change, dated January 2008 (CAPCOA 2008). Following the rationale presented in the CAPCOA Guidance, the aggregate emissions from all projects with individual annual emissions equal to or less than the identified screening levels for a 90 percent market capture rate would not impede the achievement of the statewide GHG emissions reduction targets.

Tier 4 and Tier 5 interim thresholds are intended to demonstrate project consistency with the AB 32 goal of achieving 1990 emission levels by 2020 and the SB 32 goal of reducing GHG emissions to 40 percent below 1990 levels by 2030.

Therefore, due to the project’s proposed industrial use, this analysis utilizes SCAQMD’s Tier 3 industrial threshold of 10,000 MTCO₂e per year and then, per SCAQMD’s Tier 2 thresholds assessed in compliance with applicable plans, policies, regulations, and requirements adopted to implement a statewide, regional, or local plan to reduce or mitigate GHG emissions. As a land-use development project, the most directly applicable adopted regulatory plan to reduce GHG emissions is the SANDAG’s Regional Plan, designed to achieve regional GHG reductions from the land use and transportation sectors as required by SB 375 and the state’s long-term climate goals. This analysis also considers consistency with regulations and requirements adopted by the Scoping Plan and the City’s CAP.

Construction Greenhouse Gas Emissions Impact

The greenhouse gas emissions from project construction equipment and worker vehicles are shown in Table 10. The emissions are from all phases of construction. Construction-related emissions are amortized over 30 years in conjunction with the project’s operational emissions as recommended by the Association of Environmental Professionals (AEP 2016).²⁰

The total construction emissions amortized over 30 years are estimated at 20.44 metric tons of CO₂e per year. Annual CalEEMod output calculations are provided in Appendix B of the Air Quality, Greenhouse Gas, and Health Risk Impact Study (Appendix C).

Table 10: Estimated Annual Construction Greenhouse Gas Emissions						
Year	Metric Tons Per Year					
	Bio-CO ₂	NBio-CO ₂	Total CO ₂	CH ₄	N ₂ O	CO ₂ e (MT)
2022	0.00	490.61	490.61	0.07	0.02	499.42
2023	0.00	112.00	112.00	0.02	0.00	113.65
Total	0.00	602.61	602.61	0.09	0.03	613.07
Annualized Construction Emissions						20.44
Notes:						
¹ MTCO ₂ e=metric tons of carbon dioxide equivalents (includes carbon dioxide, methane, and nitrous oxide).						
² The emissions are averaged over 30 years per recommendations by AEP (2007).						
* CalEEMod output (Appendix B of Air Quality, Greenhouse Gas, and Health Risk Impact Study (Appendix C))						

Operational Greenhouse Gas Impact

Operational emissions occur over the life of the project. Table 11 shows that the total for the project's emissions (baseline emissions without credit for any reductions from sustainable design and/or regulatory requirements) would be 5,358.63 metric tons of CO₂e per year.

Table 11: Opening Year Project-Related Greenhouse Gas Emissions						
Category	Greenhouse Gas Emissions (Metric Tons/Year) ¹					
	Bio-CO ₂	NonBio-CO ₂	CO ₂	CH ₄	N ₂ O	CO ₂ e
Area Sources ²	0.00	0.01	0.01	0.00	0.00	0.01
Energy Usage ³	0.00	178.17	178.17	0.01	0.00	178.87
Mobile Sources ⁴	0.00	4,813.80	4,813.80	0.34	0.22	4,887.13
Solid Waste ⁵	33.99	0.00	33.99	2.01	0.00	84.22
Water ⁶	13.07	131.40	144.47	1.35	0.03	187.97
Subtotal Emissions	47.07	5,123.38	5,170.44	3.71	0.25	5,338.19
Amortized Construction Emissions						20.44
Total Emissions						5,358.631
Threshold						10,000
Exceeds Threshold						No
Notes: ¹ Source: CalEEMod Version 2020.4.0 ² Area sources consist of GHG emissions from consumer products, architectural coatings, and landscape equipment. ³ Energy usage consists of GHG emissions from electricity and natural gas usage. ⁴ Mobile sources consist of GHG emissions from vehicles. ⁵ Solid waste includes the CO ₂ and CH ₄ emissions created from the solid waste placed in landfills. ⁶ Water includes GHG emissions from electricity used for transport of water and processing of wastewater. ⁷ Construction GHG emissions based on a 30-year amortization rate.						

Therefore, as the project's total emissions (Construction and Operation) would not exceed the SCAQMD draft Tier 3 industrial threshold of 10,000 MT of CO₂e per year, impacts are considered **less than significant**.

- b) **Less than significant impact.** The project could potentially conflict with an applicable plan, policy, or regulation of an agency adopted to reduce greenhouse gas emissions. The project's GHG impacts are evaluated by assessing the project's consistency with applicable statewide, regional, and local GHG reduction plans and strategies.

The Office of Planning and Research (OPR) encourages lead agencies to use programmatic mitigation plans and tier programs when performing individual project analyses. The City has adopted the City of Chula Vista CAP, which encourages and requires applicable projects to implement energy efficiency measures. In addition, the California Climate Action Report (CAT) Report provides recommendations for specific emission reduction strategies for reducing GHG emissions and reaching the targets established in AB 32 and Executive Order S-3-05. The 2008 Climate Change Scoping Plan provides measures to achieve AB 32 targets statewide. On a regional level, the San Diego Association of Governments' (SANDAG) Regional Plan contains measures to achieve Vehicle Miles Traveled (VMT) reductions required under SB 375. Thus, if the project complies with these plans, policies, regulations, and requirements, it will have a **less than significant impact** because it would be consistent with the overarching state, regional, and local plans for GHG reduction.

A consistency analysis is provided below and describes the project's compliance with or exceedance of performance-based standards included in the regulations outlined in the applicable portions of the City of Chula Vista CAP, 2008 and 2017 Climate Change Scoping Plan, and SANDAG's Regional Plan.

City of Chula Vista CAP Consistency Analysis

The focus of the City's updated CAP included promoting energy- and water-efficient buildings, smart growth, clean transit, zero-waste policies, and increased local energy generation and water resources. Table 12 summarizes reduction strategies from the CAP and evaluates project consistency with each

strategy. As shown in Table 12, as many of the CAP reduction strategies would be implemented directly by the City, they do not apply to individual development projects. The project would be consistent with all applicable CAP reduction strategies; therefore, the project **would not conflict with the CAP**.

Table 12: Project Consistency with the City of Chula Vista Climate Action Plan		
Category	Reduction Strategy	Project Consistency
Water Conservation & Reuse		
Water Education and Enforcement	Expand education and enforcement targeting landscape water waste.	Not applicable. The project would not impede efforts to expand education or enforcement targeting landscaping water waste.
Water Efficiency Upgrades	Update the City's Landscape Water Conservation Ordinance to promote more water-wise landscaping designs.	Not applicable. The project would not impede efforts to update the City's Landscape Water Conservation Ordinance.
	Require water-saving retrofits in existing buildings at a specific point in time.	Not applicable. The project does not include the re-use of existing buildings and would not impede efforts to require water-saving retrofits in existing buildings.
Water Reuse Plan & System Installations	Develop a Water Reuse Master Plan to maximize the use of stormwater, graywater, and onsite water reclamation.	Not applicable. The project would not impede efforts to develop a Water Reuse Master Plan. The project will comply with the City's landscape ordinance.
	Streamline complex graywater system's permit review.	Not applicable. The project would not impede efforts to streamline permit reviews for graywater systems.
Waste Reduction		
Zero Waste Plan	Develop a Zero Waste Plan to supplement statewide green waste, recycling, and plastic bag ban efforts.	Not applicable. The project would not impede efforts to develop a Zero Waste Plan. The project will include on-site recycling storage.
Renewable & Energy Efficient		
Energy Education & Enforcement	Expand education targeting key community segments and facilitating energy performance disclosure.	Not applicable. The project would not impede efforts to expand energy education and performance disclosure.
	Leverage the building inspection process to distribute energy-related information and to deter unpermitted, low-performing energy improvements.	Not applicable. The project would not impede efforts to distribute energy-related information
Clean Energy Sources	Incorporate Solar Photovoltaic into all new residential and commercial buildings.	Not applicable. The project is industrial and would not impede efforts to adopt pre-wiring standards or develop a solar photovoltaic requirement in residential and commercial buildings.
	Provide more grid-delivered clean energy through Community Choice Aggregation or other mechanism.	Not applicable. The project would not impede efforts to provide grid-delivered clean energy.
Energy Efficiency Upgrades	Expand the City's "cool roof" standards to include re-roofs and western areas.	Not applicable. The project would not impede efforts to revise the City's "cool roof" standards to include re-roofs and western areas. The project will include cool roofs in compliance with Title 24 standards.
	Facilitate more energy upgrades in the community through incentives, permit streamlining and education.	Not applicable. The project would not impede efforts to facilitate energy upgrades in the community.
	Require energy-savings retrofits in existing buildings at a specific point in time.	Not applicable. The project would not impede efforts to require energy savings retrofits in existing buildings.

Table 12: Project Consistency with the City of Chula Vista Climate Action Plan		
Category	Reduction Strategy	Project Consistency
Robust Urban Forests	Plant more shade trees to save energy, address heat island issues, and improve air quality.	Consistent. The project will be required to plant shade trees within the parking lot, along the project perimeter, etc., as per specifications identified within the City's Municipal Code for industrial uses.
Smart Growth & Transportation		
Complete Streets & Neighborhoods	Incorporate "Complete Streets" principles into municipal capital projects and plans.	Not applicable. The project would not impede efforts to improve municipal capital projects and plans.
	Encourage higher density and mixed-use development in Smart Growth areas, especially around trolley stations and other transit nodes.	Not applicable. The project would not impede efforts to construct additional high-density and mixed-use development in Smart Growth areas.
Transportation Demand Management	Utilize bike facilities, transit access/passes and other Transportation Demand Management and congestion management offerings.	Not applicable. The project would not impede efforts to develop Transportation Demand Management and congestion management offerings. Furthermore, the project site is located close to existing transit stops, with stops located as close as approximately 0.9 miles south of the project site.
	Expand bike-sharing, car-sharing, and other "last mile" transportation options.	Not applicable. The project would not impede efforts to develop Transportation Demand Management and congestion management offerings. Furthermore, the project site is located close to existing transit stops, with stops located as close as approximately 0.9 miles south of the project site.
Alternative Fuel Vehicle Readiness	Support the installation of more local alternative fueling stations.	Not applicable. The project would not impede efforts to install more local alternative fueling stations.
	Designate preferred parking for alternative fuel vehicles.	Not applicable. The project would not impede efforts to designate preferred parking for alternative fuel vehicles.
	Design all new residential and commercial buildings to be "Electric Vehicle Ready."	Not applicable. The project is not a residential or commercial use; however, it would be designed to comply with 2019 CalGreen requirements for electric vehicle charging equipment provisions.
Notes: ¹ Source: Chula Vista Climate Action Plan, September 2017.		

Consistency with SANDAG's San Diego Forward: The Regional Plan

Regarding consistency with SANDAG's Regional Plan, the project would include site design elements, and Project Design Features (PDFs) developed to support the policy objectives of the RTP and SB 375.

Table 13 illustrates the project's consistency with all applicable goals and policies of the Regional Plan (SANDAG 2015).

Table 13: Project Consistency with San Diego Forward: The Regional Plan ¹		
Category	Policy Objective or Strategy	Consistency Analysis
The Regional Plan - Policy Objectives		
Mobility Choices	Provide safe, secure, healthy, affordable, and convenient travel choices between the places where people live, work and play.	Consistent. The project is located near MTS bus route 703/704 and Interstate 805.

Table 13: Project Consistency with San Diego Forward: The Regional Plan¹

Category	Policy Objective or Strategy	Consistency Analysis
Mobility Choices	Take advantage of new technologies to make the transportation system more efficient and environmentally friendly.	Not applicable. The project would not impair SANDAG's ability to employ new technologies to make travel more reliable and convenient.
Habitat and Open Space Preservation	Focus growth in areas that are already urbanized, allowing the region to set aside and restore more open space in our less developed areas.	Consistent. The project is surrounded by existing industrial development and would be located close to major urban centers. Furthermore, the project would also be a source of employment.
Habitat and Open Space Preservation	Protect and restore our region's urban canyons, coastlines, beaches, and water resources.	Not Applicable. The project would not impair the ability of SANDAG to protect and restore urban canyons, coastlines, beaches, and water resources. Furthermore, the project is located in an already developed area.
Regional Economic Prosperity	Invest in transportation projects that provide access for all communities to a variety of jobs with competitive wages.	Not Applicable. The project would not impair the ability of SANDAG to invest in transportation projects available to all members of the Community.
Regional Economic Prosperity	Build infrastructure that makes the movement of freight in our community more efficient and environmentally friendly.	Consistent. The project proposes the development of the site with warehouse/distribution and self-storage buildings close to other industrial uses and near Interstate 805.
Partnerships/Collaboration	Collaborate with Native American tribes, Mexico, military bases, neighboring counties, infrastructure providers, the private sector, and local communities to design a transportation system that connects to the mega-region and national network, works for everyone, and fosters a high quality of life for all.	Not Applicable. The project would not impair the ability of SANDAG to provide transportation choices to better connect the San Diego region with Mexico, neighboring counties, and tribal nations.
Partnerships/Collaboration	As we plan for our region, recognize the vital economic, environmental, cultural, and community linkages between the San Diego region and Baja California.	Not Applicable. The project would not impair the ability of SANDAG to provide transportation choices to connect the San Diego region with Mexico better.
Healthy and Complete Communities	Create great places for everyone to live, work, and play.	Consistent. The project is an industrial project with a current land use designation of Limited Industrial (IL) according to the City of Chula Vista General Plan Land Use Diagram. The project is near MTS bus route 703/704 and Interstate 805 and is surrounded by existing industrial uses.
Healthy and Complete Communities	Connect communities through a variety of transportation choices that promote healthy lifestyles, including walking and biking.	Consistent. The project is an industrial and self-storage project located near MTS bus route 703/704 and Interstate 805. Existing industrial uses also surround the project site.
Environmental Stewardship	Make transportation investments that result in cleaner air, environmental protection, conservation, efficiency, and sustainable living.	Consistent. The project is an industrial and self-storage project located near MTS bus route 703/704 and Interstate 805.
Environmental Stewardship	Support energy programs that promote sustainability.	Consistent. The project would comply with the current building standards.
Sustainable Communities Strategy - Strategies		

Table 13: Project Consistency with San Diego Forward: The Regional Plan ¹		
Category	Policy Objective or Strategy	Consistency Analysis
Strategy Number 1	Focus housing and job growth in urbanized areas where there is existing and planned transportation infrastructure, including transit.	Consistent. The project would be located close to major urban centers as it is situated near MTS bus route 703/704 and Interstate 805 and is surrounded by existing industrial development. Furthermore, the project would also be a source of employment.
Strategy Number 2	Protect the environment and help ensure the success of smart growth land-use policies by preserving sensitive habitat, open space, cultural resources, and farmland.	Consistent. The project would be located close to major urban centers as it is situated near MTS bus route 703/704 and Interstate 805 and is surrounded by existing industrial development.
Strategy Number 3	Invest in a transportation network that gives people transportation choices and reduces greenhouse gas emissions.	Consistent. The project is an industrial and self-storage project located near MTS bus route 703/704 and Interstate 805.
Strategy Number 4	Address the housing needs of all economic segments of the population.	Not Applicable. The project would not impair the ability of SANDAG to address the housing needs of all economic segments of the population.
Strategy Number 5	Implement the Regional Plan through incentives and collaboration.	Not Applicable. The project would not impair the ability of SANDAG to implement the Regional Transportation Plan through incentives and collaborations.
Notes: MTS = San Diego Metropolitan Transit System; SANDAG = San Diego Association of Governments. ¹ Source: SANDAG, 2015.		

As shown in Table 13, the project is consistent with all applicable Regional Plan Policy Objectives or Strategies. Impacts would be **less than significant**.

CARB Scoping Plan Consistency

The California Air Resources Board (CARB) approved a Climate Change Scoping Plan in December 2008. The Scoping Plan outlines the State's strategy to achieve the 2020 greenhouse gas emissions limit. The Scoping Plan "proposes a comprehensive set of actions designed to reduce overall greenhouse gas emissions in California. The plan will improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health" (California Air Resources Board 2008). The measures in the Scoping Plan have been in place since 2012.

In November 2017, CARB released the 2017 Scoping Plan. The Scoping Plan incorporates, coordinates, and leverages many existing and ongoing efforts and identifies new policies and actions to accomplish the State's climate goals, and includes a description of a suite of specific actions to meet the State's 2030 GHG limit. In addition, Chapter 4 provides a broader description of the many actions and proposals being explored across the sectors, including the natural resources sector, to achieve the State's mid and long-term climate goals.

Guided by legislative direction, the actions identified in the 2017 Scoping Plan reduce overall GHG emissions in California and deliver policy signals that will continue to drive investment and certainty in a low-carbon economy. The 2017 Scoping Plan builds upon the successful framework established by the Initial Scoping Plan and First Update while identifying new, technologically feasible, and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities. The Plan includes policies requiring direct GHG reductions at some of the State's largest stationary and mobile sources. These policies include the use of

lower GHG fuels, efficiency regulations, and the Cap-and-Trade Program, which constrains and reduces emissions at covered sources.

As the latest 2017 Scoping Plan builds upon previous versions, project consistency with applicable strategies of the 2008 and 2017 Plan are assessed in Table 14. As shown in Table 14, the project is consistent with the applicable strategies, resulting in a **less than significant impact**.

Table 14: Project Consistency with CARB Scoping Plan Policies and Measures¹	
2008 Scoping Plan Measures to Reduce Greenhouse Gas Emissions	Project Compliance with Measure
California Light-Duty Vehicle Greenhouse Gas Standards – Implement adopted standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel, and vehicle technology programs with long-term climate change goals.	Consistent. These are CARB-enforced standards; vehicles that access the project are required to comply with the standards, and the project will comply with the strategy.
Energy Efficiency – Maximize energy efficiency building and appliance standards; pursue additional efficiency, including new technologies, policy, and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California.	Consistent. The project will be compliant with the current Title 24 standards.
Low Carbon Fuel Standard – Develop and adopt the Low Carbon Fuel Standard.	Consistent. These are CARB-enforced standards; vehicles that access the project are required to comply with the standards, and the project will comply with the strategy.
Vehicle Efficiency Measures – Implement light-duty vehicle efficiency measures.	Consistent. These are CARB-enforced standards; vehicles that access the project are required to comply with the standards, and the project will comply with the strategy.
Medium/Heavy-Duty Vehicles – Adopt medium and heavy-duty vehicle efficiency measures.	Consistent. These are CARB-enforced standards; vehicles that access the project are required to comply with the standards, and the project will comply with the strategy.
Green Building Strategy – Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.	Consistent. The California Green Building Standards Code (proposed Part 11, Title 24) was adopted as part of the California Building Standards Code in the CCR. Part 11 establishes voluntary standards that are mandatory in the 2019 edition of the Code on planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants. The project will be subject to these mandatory standards.
High Global Warming Potential Gases – Adopt measures to reduce high global warming potential gases.	Consistent. CARB identified five measures that reduce HFC emissions from vehicular and commercial refrigeration systems; vehicles that access the project are required to comply with the measures that will comply with the strategy.
Recycling and Waste – Reduce methane emissions at landfills. Increase waste diversion, composting, and commercial recycling. Move toward zero-waste.	Consistent. The state is currently developing a regulation to reduce methane emissions from municipal solid waste landfills. The project will be required to comply with City programs, such as any City recycling and waste reduction programs, which comply with the 75 percent reduction required by 2020 per AB 341.
Water – Continue efficiency programs and use cleaner energy sources to move and treat water.	Consistent. The project will comply with all applicable City ordinances and CAL Green requirements.
2017 Scoping Plan Recommended Actions to Reduce Greenhouse Gas Emissions	Project Compliance with Recommended Action
Implement Mobile Source Strategy: Further, increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean Car regulations.	Consistent. These are CARB-enforced standards; vehicles that access the project are required to comply with the standards, and the project will comply with the strategy.
Implement Mobile Source Strategy: At least 1.5 million zero-emission and plug-in hybrid light-duty electric vehicles by 2025 and at least 4.2 million zero-emission and plug-in hybrid light-duty electric vehicles by 2030.	Consistent. These are CARB-enforced standards; vehicles that access the project are required to comply with the standards, and the project will comply with the strategy.

Table 14: Project Consistency with CARB Scoping Plan Policies and Measures¹

2008 Scoping Plan Measures to Reduce Greenhouse Gas Emissions	Project Compliance with Measure
Implement Mobile Source Strategy: Innovative Clean Transit: Transition to a suite of to-be-determined innovative clean transit options. Assumed 20 percent of new urban buses purchased beginning in 2018 will be zero-emission buses with the penetration of zero-emission technology ramped up to 100 percent of new sales in 2030. Also, new natural gas buses, starting in 2018, and diesel buses, starting in 2020, meet the optional heavy-duty low-NO _x standard.	Consistent. These are CARB-enforced standards; vehicles that access the project are required to comply with the standards, and the project will comply with the strategy.
Implement Mobile Source Strategy: Last-Mile Delivery: New regulation that would result in the use of low NO _x or cleaner engines and the deployment of increasing numbers of zero-emission trucks primarily for class 3-7 last-mile delivery trucks in California. This measure assumes ZEVs comprise 2.5 percent of new Class 3–7 truck sales in local fleets starting in 2020, increasing to 10 percent in 2025 and remaining flat through 2030.	Consistent. These are CARB-enforced standards; vehicles that access the project are required to comply with the standards, and the project will comply with the strategy.
Implement SB 350 by 2030: Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses by 2030.	Consistent. The project will be compliant with the current Title 24 standards.
By 2019, develop regulations and programs to support organic waste landfill reduction goals in the SLCP and SB 1383.	Consistent. The project will be required to comply with City programs, such as any City recycling and waste reduction programs, which comply with the 75 percent reduction required by 2020 per AB 341.
Notes: ¹ Source: CARB Scoping Plan (2008 and 2017)	

Therefore, the project will not conflict with any applicable plan, policy, or regulation of an agency adopted to reduce greenhouse gas emissions. Impacts are considered to be **less than significant**.

Mitigation: No mitigation measures are required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Comments:

a) Less than significant.

Construction

Various hazardous substances and wastes would be transported, stored, used, and generated during construction. These would include fuels for machinery and vehicles, new and used motor oils, and storage containers and applicators containing such materials. The handling of hazardous materials would be a temporary activity and coincide with the short-term construction phase of the project. It is expected that only the amounts of hazardous materials needed would be kept on-site, and any handling of such materials will be limited in both quantities and concentrations. Accident prevention and containment are the responsibility of the construction contractors, and provisions to properly manage hazardous substances and wastes are typically included in construction specifications. Hazardous materials shall not be disposed of or released onto the ground, the underlying groundwater, or surface water. A totally enclosed containment shall be provided for all trash. All construction waste, including trash and litter, garbage, other solid debris, petroleum products, and other potentially hazardous materials, shall be removed to a waste facility permitted to treat, store, or dispose of such materials.

Construction contractors would be required to comply with all applicable federal, state, and local laws and regulations regarding the transport, use, and storage of hazardous construction-related materials, including but not limited to requirements imposed by the Environmental Protection Agency (EPA), California Department of Toxic Substances Control (DTSC), San Diego County Air Pollution Control District (APCD), San Diego County Department of Environmental Health, and San Diego Regional Water Quality Control Board (RWQCB). With mandatory compliance with applicable hazardous materials regulations, the project would not create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials during the construction phase. In addition, the implementation of the SWQMP, which contains construction BMPs for handling hazardous materials, such as requiring stockpiles and other sources of pollutants to be covered when there is a chance of rain. With the implementation of applicable health and safety laws and the BMPs of the SWQMP, impacts related to hazardous materials during construction would be **less than significant**, directly, indirectly, and cumulatively.

Operation

The buildings' future occupant(s) is not yet identified. However, the project is designed to house a warehouse/distribution occupant, and hazardous materials could be transported and used during daily operations. State and federal Community-Right-to-Know laws allow the public access to information about the amounts and types of chemicals in use at local businesses. Laws are in place requiring businesses to plan and prepare for possible chemical emergencies. Any business that occupies a building on the project site and handles hazardous materials (as defined in Section 25500 of California Health and Safety Code, Division 20, Chapter 6.95) will require a Chula Vista Fire Department permit to register the business as a hazardous materials handler. Such businesses also are required to comply with California's Hazardous Materials Release Response Plans and Inventory Law. This law requires immediate reporting to the Hazardous Materials Division of the County of San Diego's Environmental Health and Quality Department and the State Office of Emergency Services regarding any release or threatened release of hazardous material, regardless of the amount handled by the business. The plan must include pre-emergency planning of emergency response procedures, notifications, coordination of affected government agencies and responsible parties, training, and follow-up.

In addition, any business handling at any one time greater than 500 pounds of solid, 55 gallons of liquid, or 200 cubic feet of gaseous hazardous material, is required, under Assembly Bill 2185 (AB 2185), to file a Hazardous Materials Business Emergency Plan (HMBEP). An HMBEP is a written set of procedures and information created to help minimize the effects and extent of a release or threatened release of hazardous material. The HMBEP intends to satisfy federal and state Community Right-To-Know laws and provide detailed information for use by emergency responders.

If businesses that use or store hazardous materials occupy the project, the business owners and operators would be required to comply with all applicable federal, state, and local regulations to ensure proper use, storage, use, emission, and disposal of hazardous substances (as described above).

The closest existing sensitive receptors to the project are the single-family residential land uses located 3 feet to the west, and the multi-family residential land uses located 40 feet to the north of the project site.

A Health Risk Assessment (HRA) (Air Quality, Greenhouse Gas, and Health Risk Impact Study (Appendix C)) has been prepared for the project as it is currently designed. Any tenant will prepare and submit an acceptable Business Plan and Risk Management Prevention Program to the County Department of Environmental Health, as applicable, and obtain all other necessary licenses and permits.

In addition to the above, the proposed land use will also have the typical use of commercially available cleaning products, landscaping chemicals and fertilizers, and various other commercially available substances. The project's operation would be required to comply with relevant federal, state, and local health and safety laws intended to minimize the health risk to the public associated with hazardous materials. Lastly, the project would implement the PDP SWQMP, which includes structural BMPs that ensure compliance with pollutant control requirements. With mandatory regulatory compliance, potentially hazardous materials impacts associated with the long-term operation of the project are determined to **be less than significant**, directly, indirectly, and cumulatively.

- b) **Less than significant.** Accidents involving hazardous materials would not be significant to the public or the environment when handled as required and discussed under Section IX a) above.

Construction

The transport, use, and handling of hazardous materials on the project site during construction will be handled according to all regulations to ensure the risk is **less than significant**, directly, indirectly, or cumulatively.

Operation

The project site would operate as a warehouse/distribution center upon buildout. Based on the operational characteristics of warehouse/distribution centers, hazardous materials could be used during a future occupant's daily operations. However, as discussed above under Section IX a) above, the project applicant must comply with all applicable local, state, and federal regulations related to the transport, handling, and usage of hazardous materials. Accordingly, impacts associated with the accidental release of hazardous materials would be **less than significant** during the long-term operation of the project, directly, indirectly, and cumulatively.

- c) **No impact.** There are no schools within 0.25-mile of the project site (City of Chula Vista CVMapper, accessed February 6, 2022). Valle Lindo Elementary School is located approximately .28 miles to the north. Therefore, if the project emits hazardous emissions or handles hazardous or acutely hazardous materials, substances, or waste in accordance with all rules and regulations, it will have **no impact** on a school or proposed school within one-quarter mile of the project.
- d) **Less than significant.** The Phase I Environmental Site Assessment Assessor's Parcel Number 644-040-01 517 Shinohara Lane, Chula Vista, CA 91911, prepared by SCS Engineers, July 13, 2021 (Appendix I), included a search of regulatory databases, including the California EPA's Regulated Site Portal, the San Diego RWQCB's Geotracker database, and Department of Toxic Substance Control's (DTSC's) EnviroStor database (EDR). In addition, the Soil Vapor Survey and Human Health Risk Screening Assessor's Parcel Number 644-040-01 517 Shinohara Lane, Chula Vista, CA 91911, prepared by SCS Engineers, August 5, 2021 (Appendix J), provides laboratory results of soil sampling supporting the Phase I ESA. The project site is not included on any hazardous materials list compiled pursuant to Government Code Section 65962.5.

Based on SCS's off-site source survey, it was noted that several facilities in the site vicinity were reported to have had releases of hazardous materials/waste or petroleum products. It is SCS's opinion that, with the exception noted below, there are no recognized environmental conditions at the site due to the known and reported releases of hazardous materials/wastes or petroleum products from an off-site source. The judgment is based on one or more of the following: the reported regulatory status (e.g., case closed), the media affected (e.g., soil contamination only), the distance from the site, the direction from the site with respect to the reported groundwater flow direction, and information obtained through a review of County of San Diego Department of Environmental Health files (pages 26 - 27 Phase I Environmental Site Assessment (Appendix I)).

The exception is the Omar Rendering facility located at 1886 Auto Park Place (approximately 1,500 feet to the east). In May 1996, groundwater was found to be impacted by volatile organic compounds (VOCs) at the property located adjacent to the east of the site at the Brandywine Distribution Center at 1670 & 1690 Brandywine Avenue. Groundwater results indicated VOCs above laboratory reporting limits, primarily with trichloroethene (TCE) at 720 micrograms per liter (ug/L) and also with tetrachloroethene (PCE) at 56 ug/L, and methylene chloride (MEC) at 79 ug/L in MW-04.

It was determined that the property was not the source of the pollutants and that the likely source was the former Omar Rendering facility located at 1886 Auto Park Place, a property that stored hazardous waste in evaporation ponds from 1959 to 1978, which were situated to the east and cross- to up-gradient of the Brandywine Distribution Center.

The Regional Water Quality Control Board (RWQCB) closed the case administratively in 2017, noting the Brandywine Distribution Center was not the source of the contamination. The samples collected at the property suggest a potential threat to indoor air. The RWQCB recommended more recent groundwater data.

Omar Rendering facility is approximately 1,500 feet to the east and cross- to up-gradient of the site and began remediation circa 1980, removing the waste ponds and their disposal at a permitted location. In 1981, the impacted soil beneath the waste ponds was placed in a lined and capped waste cell in the northwest corner of the property. Subsequently, the waste cell has been maintained and monitored by the RWQCB.

In January 2021, during the most recent sampling event at the former Omar Rendering facility, the monitoring well closest to the project site, well MW-18, situated approximately 1,500 feet to the east of the project site, indicated results for TCE at 4.3 ug/L. No additional recent well data was available for wells closer to the site to indicate whether or not the TCE plume may still be in the immediate vicinity of or beneath the project site.

Based on the concentrations of VOCs at the east adjacent property indicated in 1996 (up to 720 ug/L TCE), the cross- to up-gradient position of the source with respect to the groundwater flow direction to the project site (southwest), that the presence of TCE was reported to be present in the monitoring well closest to the project site from the source in the most recent groundwater monitoring report from January 2021, and that no additional, more recent data is available to indicate whether or not the TCE plume may still be in the immediate vicinity of or beneath the project site, there is a low to moderate likelihood that a recognized environmental condition exists at the project site in connection with the former release from the Omar Rendering facility (pages 26 - 27 Phase I Environmental Site Assessment (Appendix I)). Nevertheless, an additional assessment (e.g., soil vapor sampling) was taken to evaluate the potentially associated releases.

SCS performed an assessment consisting of sampling four soil vapor probes and collecting five soil vapor samples to assess possible vapor intrusion impacts to the project site from an unauthorized release of volatile organic compounds (VOCs) from the Omar Rendering facility. The VOCs benzene, m,p-xylenes, and trichloroethene (TCE) were present in soil vapor beneath the project site. Because VOCs were reported above the laboratory reporting limits in the soil vapor samples collected from the site, a vapor intrusion risk screening (VIRS) was conducted to assess the potential for Significant²¹ vapor intrusion risk posed to the future industrial occupants at the site due to the upward migration of VOCs in soil vapor.

After applying the Department of Toxic Substances Control, (DTSC) attenuation factor of 0.0005 for a future commercial/industrial land use to the maximum reported concentrations of the constituents reported to be present beneath the site (TCE, benzene, and m,p-xylenes), the maximum theoretical concentrations of VOCs in indoor air at the site are below the commercial/industrial screening levels (DTSC- Modified Screening Levels or EPA Regional Screening Levels). Therefore, SCS recommends no further action for the site based on soil vapor intrusion (pages 7 - 8 Soil Vapor Survey and Human Health Risk Screening (Appendix J)).

The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. With the inclusion of a mitigation measure concerning the export of soil from the site, the project's impacts would be **less than significant**, directly, indirectly, and cumulatively.

- e) **No impact.** The project is in Area 2 of the Brown Field Municipal Airport Land Use Compatibility Plan (ALUCP). It is not within the noise contours of the ALUCP. The project will include graded pads ranging in height from 197 to 200 average mean sea level (amsl), with the building at 43 feet. The project will have **no impact** on an airport land use plan, nor would the project result in a safety hazard or excessive noise for people residing or working in the project area
- f) **No impact.** The City of Chula Vista does not have an adopted emergency response plan or emergency evacuation plan. However, the City of Chula Vista Fire Department has the following scenarios that

²¹ For the purposes of this assessment, significant is defined as greater than one in 1,000,000 excess lifetime cancer risk or a hazard index of greater than 1.

require disaster preparedness: wildfire, earthquakes, flood, terrorism, and tsunami. The only scenario with an evacuation route map is the tsunami scenario. The evacuation routes are along the coast and direct evacuees inland. According to the tsunami evacuation map, a tsunami would not affect the project site.

Project access will have access off Shinohara Lane. The road is an existing street within the City's established street system. The project will not significantly alter the road or the current circulation pattern in the area.

Construction activities may temporarily restrict vehicular traffic. However, even temporary changes to the existing roadway network require the approval of the City and notification to all emergency responders.

The project provides adequate emergency vehicle access, including street widths and vertical clearance. Implementing federal, state, and local laws and regulations in the project's construction would result in **no impact**, directly, indirectly, or cumulatively, on adopted emergency response or evacuation plans.

- g) **Less than significant.** Figure 9-9 – Wildland Fire Hazards Map of the General Plan Chula Vista Vision 2020 (page E-61) indicates that the property is not in an area of High or Very High Wildland Fire Hazard. The CalFire Fire Hazard Severity Zone Viewer also demonstrates that the property is not in a Very High Fire Severity Zone of local responsibility. Therefore, the project will have a **less than significant** impact directly, indirectly, and cumulatively on the exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires.

Mitigation: No mitigation measures are required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY.				
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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:				
i) Result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Create or contribute runoff water which would exceed the capacity of existing or planned	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
stormwater drainage systems or provide substantial additional sources of polluted runoff?				
iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Comments:

The analysis for this Section, Section X, is based upon the information found in the Preliminary Drainage Study for Project Shinohara OnPoint Development 517 Shinohara Lane Chula Vista, CA 91911, prepared by Pasco Laret Suiter & Associates, May 20, 2022 (Appendix K), and the Priority Development Project (PDP) Storm Water Quality Management Plan (SWQMP) Project Shinohara, OnPoint Development, 644-040-01, prepared by Pasco Laret Suiter & Associates, May 20, 2022 (Appendix L).

a) Less than significant impact.

National Pollutant Discharge Elimination System (NPDES)

The project site is located in the San Diego Bay Watershed, comprising three (3) smaller watersheds. The project is situated in the smaller Otay River Watershed that discharges into San Diego Bay. As part of Section 402 of the Clean Water Act, the EPA has established regulations under the National Pollutant Discharge Elimination System (NPDES) program to control direct stormwater discharges. On May 8, 2013, the California Regional Water Quality Control Board, San Diego Region (RWQCB), adopted an updated National Pollutant Discharge Elimination System (NPDES) Municipal Permit, Order No. R9-2013-0001, as Amended by R9-2015-0001 and R9-2015-0100 (MS4 Permit). In the City of Chula Vista, the San Diego Regional Water Quality Control Board (RWQCB) administers the NPDES permitting program and develops NPDES permitting requirements. The NPDES program regulates industrial pollutant discharges, including construction activities.

The two basic types of NPDES permits issued are individual and general permits. An individual permit is a permit specifically tailored to a particular facility. Once a facility submits the appropriate application(s), the permitting authority develops a permit for that facility based on the information contained in the permit application (e.g., type of activity, nature of discharge, receiving water quality). The authority issues the permit to the facility for a specific time period (not to exceed five years) with a requirement that the facility reapplies before the expiration date.

The General Construction Permit requires that construction sites with 1.0 acre or greater soil disturbance or less than 1.0 acre, but part of a greater common plan of development, apply for coverage for discharges under the General Construction Permit. By submitting a Notice of Intent (NOI) for coverage, developing a Stormwater Pollution Prevention Plan (SWPPP), and implementing Best Management Practices (BMPs) to address construction site pollutants, the General Construction permit requirements are met. Since the project is greater than one acre, these requirements are in place. The applicant shall abide by all the provisions outlined in the RWQCB NPDES general permit for construction activities.

Jurisdictional Runoff Program (JRMP)

The City of Chula Vista has prepared the [Jurisdictional Runoff Program](#) (JRMP) San Diego Region (pages ES-1 – ES-4) to describe the specific runoff management programs and activities implemented to comply with the requirements of the Municipal Permit. The JRMP includes information and regulations applicable to construction activities and industrial facilities that are applicable to this project.

Priority Development Project (PDP) Storm Water Quality Management Plan (SWQMP)

Topographically, the site slopes to the south from the northern property boundary, forming two (2) drainage basins with two (2) discharge locations.

Existing Drainage Basin A comprises the western portion of the site. Runoff drains via overland flow to an existing concrete swale located at the southern property boundary. The drainage swale carries flow east to an existing Type F catch basin at the southern property boundary. The catch basin connects to an existing private storm drain pipe that outlets via the curb outlet onto Main Street.

Existing Drainage Basin B comprises the eastern portion of the site. Runoff is conveyed via overland surface flow to an existing concrete drainage channel located at the southeastern corner of the site. The drainage channel conveys runoff south and outlets via curb outlet onto Main Street (Figure 13 – Existing Basin Map). Flow travels west via concrete curb and gutter from Main Street to an existing curb inlet. Stormwater is then conveyed south through an existing storm drain pipe and outlets over the headwall into the Otay River. The Otay River travels west and outlets at the San Diego Bay and, ultimately, the Pacific Ocean.

Existing Drainage Basin C comprises the northwesterly portion of the site. Runoff is conveyed via overland surface flow to an existing swale west of the project site. Local surface runoff from the project site and surrounding properties collects in this area and flows to the south to an existing concrete drainage channel located in the rear yard of an existing single-family residence at the end of Tanoak Court. The existing concrete channel flows to the south and then turns and flows to the west and discharges into Tanoak Court through two existing Type A curb outlets (Figure 1 – Tanoak Court Type A Curb Outlets).

Drainage improvements will include catch basins, curb inlets, and storm drain pipes. A proprietary Modular Wetland System is proposed for stormwater treatment. An underground detention vault is proposed for peak flow attenuation (Form I-3B Storm Water Quality Management Plan (Appendix L)).

Conclusion

The project must comply with the City of Chula Vista's NPDES Permit, SWPPP requirements, [Jurisdictional Runoff Management Program](#), Municipal Code [Section 14.20 – Storm Water Management and Discharge Control](#), and [Chapter 15.04 – Excavation, Grading, Clearing, Grubbing and Fills](#), and the PDP SWQMP. Therefore, the project will be designed for compliance with existing federal, state, and local water quality laws and regulations pertaining to water quality standards, ensuring a **less than significant impact**, directly, indirectly, or cumulatively, on water quality and discharge.

b) Less than significant impact.

According to the San Diego County Water Authority's 2020 Urban Water Management Plan (UWMP), which provides water to the Otay Water District who provides water to the project, the Authority will be able to meet demands for water up to the year 2045. The Otay Water District does not pump groundwater for distribution within its boundaries.

Per the Geotechnical Investigation (Appendix G, page 4), groundwater was not encountered during the investigation. The project's construction would create a less pervious area, approximately 64,809 square feet, where 423,779-square-feet currently exist.

According to the PDP SWQMP, the project would include areas where stormwater will flow from impervious to pervious areas. The project would comply with the conditions set forth by the San Diego RWQCB NPDES permitting program. Additionally, the construction of stormwater facilities and the implementation of the PDP SWQMP will ensure that adverse project impacts on groundwater supplies will be **less than significant**.

c)

- i. **Less than significant impact.** Project construction would be subject to local and state codes and erosion control and grading requirements. Because construction activities would disturb one or more acres, the project must adhere to the NPDES Construction General Permit provisions to prevent sediment from leaving the project site. Construction activities subject to this permit include clearing, grading, and other soil disturbances, such as stockpiling and excavating. The NPDES Construction General Permit requires implementing a Storm Water Pollution Prevention Plan (SWPPP), including temporary project construction features (i.e., BMPs) designed to prevent erosion and sediment, leaving the project site protecting the quality of stormwater runoff. Sediment-control BMPs may include stabilized construction entrances, straw wattles on earthen embankments, sediment filters on existing inlets, or the equivalent.

Pursuant to the General Construction Permit, construction sites with 1.0 acre or greater soil disturbance or less than 1.0 acre, but part of a greater common plan of development, must apply for coverage for discharges under the General Construction Permit. By submitting a Notice of Intent (NOI) for coverage, developing a Stormwater Pollution Prevention Plan (SWPPP), and implementing Best Management Practices (BMPs) to address construction site pollutants, the General Construction permit requirements are met. Since the project is greater than one acre, these requirements are in place. The applicant shall abide by all the provisions outlined in the RWQCB NPDES general permit for construction activities.

In conformance with PDP SWQMP, the project is required to implement structural and non-structural Best Management Practices (BMPs) to retain and treat pollutants of concern (in dry-weather runoff and first-flush stormwater runoff) and minimize hydrologic conditions of concern (HCOCs), both during and post-construction.

In addition, grading activities would be required to conform to the most current version of the California Building Code, the City Code, the approved grading plans, and best management engineering practices. The project must also comply with San Diego Air Pollution Control District Rules 50 (Visible Emissions), 51 (Nuisance), and 55 (Fugitive Dust), as noted under Section III – Air Quality and on page 9 of the Air Quality, Greenhouse Gas, and Health Risk Impact Study (Appendix C). Compliance with these federal, regional, and local requirements would reduce the potential for both on-site and off-site erosion effects to accepted levels during project construction.

For project operation, ground surfaces would be stabilized by project structures, paving, and landscaping upon completion of construction activities. Therefore, impacts associated with soil erosion and the loss of topsoil would be **less than significant**.

- ii) **Less than significant impact.** The design and implementation of these facilities will be reviewed and approved by the City Engineer to assure compliance with all applicable local, state, and federal standards.

Implementation of the required NPDES and PDP SWQMP requirements discussed above, and other applicable requirements will ensure that drainage and stormwater runoff will not create or contribute to water runoff that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Therefore, the project will have a **less than significant impact**, directly, indirectly, or cumulatively, on the rate or amount of surface runoff in a manner that would result in flooding on- or off-site.

- iii) **Less than significant impact.** Implementation of the required NPDES and PDP SWQMP requirements discussed above, and other applicable requirements will ensure that runoff water will not exceed the capacity of existing or planned stormwater drainage systems. These regulations will also ensure the project will not provide additional sources of polluted runoff. Therefore, the project will directly, indirectly, and cumulatively have a **less than significant impact**.
- v) **Less than significant impact.** Flood flows will be re-directed. As noted in the Preliminary Drainage Study (Appendix K), topographically, the site slopes to the south from the northern property boundary, forming three (3) drainage basins with three (3) discharge locations.

Existing Drainage Basin A comprises the western portion of the site. Runoff drains via overland flow to an existing concrete swale located at the southern property boundary. The drainage swale carries flow east to an existing Type F catch basin at the southern property boundary. The catch basin connects to an existing private storm drain pipe that outlets via the curb outlet onto Main Street.

Existing Drainage Basin B comprises the eastern portion of the site. Runoff is conveyed via overland surface flow to an existing concrete drainage channel located at the southeastern corner of the site. The drainage channel conveys runoff south and outlets via curb outlet onto Main Street.

Flow travels west via concrete curb and gutter from Main Street to an existing curb inlet. Stormwater is then conveyed south through an existing storm drain pipe and outlets over the headwall into the Otay River. The Otay River travels west and outlets at the San Diego Bay and, ultimately, the Pacific Ocean.

Existing Drainage Basin C comprises the northwesterly portion of the site. Runoff is conveyed via overland surface flow to an existing swale west of the project site. Local surface runoff from the project site and surrounding properties collects in this area and flows to the south to an existing concrete drainage channel located in the rear yard of an existing single-family residence at the end of Tanoak Court. The existing concrete channel flows to the south and then turns and flows to the west and discharges into Tanoak Court through two existing Type-A curb outlets (Figure 1 – Tanoak Court Type A Curb Outlets).

The proposed site will consist of two (2) major drainage basins with two (2) discharge locations that match the existing drainage discharge points and pre-project peak flow rates for Existing Drainage Basins A and B. The proposed project's area in the northwesterly corner of the project site that comprised Existing Drainage Basin C is proposed to be included in Proposed Drainage Basin A. This design will enable the proposed project to collect and convey runoff from this location to the project's peak flow detention facility and stormwater treatment and no longer discharge runoff on an existing single-family residential property. While the size of Proposed Drainage Basin A is larger than the size of Existing Drainage Basin A when comparing areas, the proposed project will provide peak flow detention, so the peak flow runoff rate from this basin for the post-project condition will be equal to or less than the pre-project condition.

Stormwater runoff from a majority of the proposed development (DMA-A) is routed to a series of BMPs, including a Contech CDS pretreatment unit, a StormTrap underground detention vault, and a BioClean Modular Wetland System (MWS). The underground detention vault has been designed to meet 100-year peak flow detention requirements. The Modular Wetland System is designed as a proprietary biofiltration BMP for stormwater treatment. Outflows from the detention vault and MWS

are discharged through a proposed storm drain pipe to the existing Type F catch basin at the southern property boundary. Stormwater is then conveyed through the neighboring property to the south through an existing private storm drain and outlets onto Main Street as in existing conditions.

Stormwater runoff from the proposed driveway (DMA-B) will be drained to a Modular Wetland System for stormwater treatment. The MWS will be designed with a 3-foot-wide curb inlet opening and a 1-inch local curb depression to capture the required water quality flow. Runoff that exceeds the water quality flow rate or capacity of the MWS will flow by the MWS and drain to the existing concrete drainage channel at the southeast corner of the project site. Outflows from the MWS will be pumped to a proposed curb outlet along the southern property boundary and discharged to the existing concrete drainage channel. As in existing conditions, the concrete drainage channel discharges onto Main Street via the curb outlet. The characteristic of existing stormwater flows through the neighboring property will not change as a result of the proposed project.

Runoff from the cut slope at the northwest portion of the project site will be conveyed via the proposed brow ditch to the existing Type F catch basin at the southern property boundary. This area (DMA-C) is considered a Self-Mitigating DMA per Chapter 5.2.1 of the City of Chula Vista BMP Design Manual.

All project site runoff is discharged onto Main Street as in existing conditions. Flow travels west via concrete curb and gutter from Main Street to an existing curb inlet. Stormwater is then conveyed south through an existing storm drain and outlets over the headwall into the Otay River. The Otay River travels west and outlets at the San Diego Bay and, ultimately, the Pacific Ocean. The Otay River is considered an exempt river reach per the Watershed Management Area Analysis (WMAA). Therefore, the project is exempt from hydromodification management requirements because the project directly discharges into an exempt river reach via a hardened conveyance (a combination of a private and public storm drain system).

The underground detention vault has been designed to provide flow control in the form of volume reduction and peak flow attenuation. The vault has been modified to include a low-flow and mid-flow orifice outlet and an overflow weir to control peak flows. The required water quality treatment flow is diverted to the downstream Modular Wetland System in accordance with Worksheet B.5-5 of the City of Chula Vista BMP Design Manual. Overflow relief for the 100-year storm event is provided with a partition weir installed within the vault and discharged directly to the existing Type F catch basin at the southern property boundary (pages 5 – 7 Preliminary Drainage Study (Appendix K)).

The project will be required to comply with all applicable water quality standards. The project will be connected to the sewer system and on-site/off-site stormwater conveyance system to further minimize potential water quality degradation. Therefore, the project will not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. The impacts will be **less than significant**, directly, indirectly cumulatively.

- d) **No impact.** The project site is located within a minimal flood hazard zone (Zone X) as mapped by FEMA (FEMA Flood Insurance Rate Map No. 06073C2156G and 06073C2157G).

Tsunamis, long-wavelength seismic sea waves generated by sudden movements of the ocean bottom during submarine earthquakes, landslides, or volcanic activity, conceivably could have adverse effects on the coastal areas of Chula Vista. However, because the City is adjacent to a relatively protected part of San Diego Bay, the potential for significant wave damage is considered low. In the unlikely event of the development of noticeable seiches, it is conceivable that local areas adjacent to the Otay Lakes and the San Diego Bay could be impacted by wave activity (page E-57 General Plan Chula Vista Vision 2020).

The City of Chula Vista Fire Department has a disaster preparedness scenario for [tsunami](#), and it is the only scenario with an [evacuation route map](#). The evacuation routes are along the coast and direct evacuees inland. According to the tsunami evacuation map, a tsunami would not affect the project site.

The project location as well as compliance with existing federal, state, and local flood hazard laws and regulations pertaining to the project's design will ensure **no impact** on flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation, directly, indirectly, or cumulatively.

- e) **Less than significant impact.** As described throughout this section, Section X, the project is required to comply with the City of Chula Vista's NPDES Permit, SWPPP requirements, [Jurisdictional Runoff Management Program](#), Municipal Code [Section 14.20 – Storm Water Management and Discharge Control](#), and [Chapter 15.04 – Excavation, Grading, Clearing, Grubbing and Fills](#), and the PDP SWQMP. Therefore, the project will be designed to comply with existing federal, state, and local water quality laws and regulations pertaining to water quality standards, ensuring a **less than significant impact**, directly, indirectly, or cumulatively, on the water quality control and groundwater management plan.

Mitigation: No mitigation measures are required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI.LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Comments:

- a) **Less than significant impact.** The project site is in an urbanized area currently Zoned and designated in the General Plan for industrial uses. The project will take its access from a driveway off Shinohara Lane in the Brandywine/Main Distribution Center as a permitted use at this location and under this zone. The following uses bound the site.
- Jabil Packaging Solutions (Plastic Injection Molding) and Crash Champions Collision Repair on the south
 - TransAmerican Manufacturing Group (Autoparts), Transpere (Information Technology Asset Solutions), Curbell Plastics, Inc. (Plastic Wholesaler), and Técnico Corporation Marine & Industrial Contractors (Shipbuilding and Repair Company) on the east
 - Multi-family residential – Mendocino Condominiums to the north
 - Single-family residential to the west

The project would utilize the existing roadway network. It would not result in improvements that would physically divide an existing community or otherwise impact circulation on public roads surrounding the site. Therefore, a **less than significant impact** will occur directly, indirectly, or cumulatively to an established community.

- b) **Less than significant impact.** The City has designated the property as IL – Limited Industrial in the City's General Plan Chula Vista Vision 2020. This designation is consistent with policies and regulations

established in the General Plan and Zoning Code. In particular, the following Land Use Objectives and Policies:

LUT-1: Provide a balance of residential and non-residential development throughout the City that achieves a vibrant development pattern, enhances the character of the City, and meets the present and future needs of all residents and businesses.

Policies: LUT 1.1, 1.4, 1.5, and 1.12

LUT-6: Ensure adjacent land uses are compatible with one another.

Policies: 6.1, 6.2, and 6.8

LUT-10: Create attractive street environments that complement private and public properties, create attractive public rights-of-way, and provide visual interest for residents and visitors.

Policies: 10.1, 10.4, and 10.5

LUT-11: Ensure that buildings and related site improvements for public and private development are well-designed and compatible with surrounding properties and districts.

Policies: 11.1, 11.2, 11.3, 11.4, and 11.5

The project provides a non-residential use fulfilling one of the last open Limited Industrial opportunities in the area. The proposed building is designed for warehouse/distribution uses to serve the local and subregional San Diego County area providing approximately 350 new jobs for the community, including management, warehousing, and driver positions.

The building is well designed and will be compatible with the surrounding area. The warehouse building is of a contemporary single-story concrete tilt-up industrial building design. The color palette uses white, light gray, and dark gray, with charcoal and blue accent colors. Elevation changes, pop-outs, and scoring are used to break up the massing of the building. At the entrances, storefront doors are provided with sectional windows and a shade canopy painted blue. The maximum height of the building is 43 feet.

The loading docks have been placed on the eastern side of the building to provide a more compatible environment with the housing to the west and north. Therefore, the operational portion of the facility will take place on the eastern side of the building, with only employee parking on the north and west sides.

Both Verdura and soil nail retaining walls will be along the western boundary of varying exposed retaining wall heights from 0 feet to 30 feet (See Appendix A Sheets L1.1 and L2.1 and Appendix B Sheet C6.0). These walls will be well designed and, in the case of the Verdura wall, planted to provide a compatible and pleasing environment.

Therefore, a **less than significant impact** will occur directly, indirectly, or cumulatively to any land use plans or zoning.

Mitigation: No mitigation measures are required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. MINERAL RESOURCES. Would the project:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments:

- a) **No impact.** According to the California Geological Survey Surface Mining and Reclamation Act (SMARA) Mineral Land Classification system and Figure 9-4 – MRZ-2 Area Map General Plan Chula Vista Vision 2020 (page E-29), the project site is located on the northern side of Main Street, just outside of the Regionally Significant MRZ-2 Aggregate Resource Area on the south side of Main Street. The project site is not designated as a mineral resource area. The project site is not known to have mineral resources; therefore, the project's implementation will have **no impact** on mineral resources, directly, indirectly, or cumulatively.
- b) **No impact.** The project site is not delineated for mineral resources on a local general plan, specific plan, or other land-use plans. Therefore, the project will have **no impact** directly, indirectly, or cumulatively on the availability of important mineral resources.

Mitigation: No mitigation measures are required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE. Would the project result in:				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
project expose people residing or working in the project area to excessive noise levels?				

Comments:

The Shinohara Industrial Center Project Noise Impact Study City of Chula Vista, CA, prepared by MD Acoustics, LLC, May 18, 2022 (Appendix M)²², analyzed the project's noise impact and found the project's noise impact on the surrounding environment to be less than significant.

a) Less than significant impact.

Existing Noise

Three (3) 24-hour ambient noise measurements were conducted at the project site. Noise measurements were taken to determine the existing ambient noise levels. Noise data indicate that the industrial facility along the south property line and traffic from surrounding streets and highways are the primary sources of noise impacting the site and the surrounding area.

Long-Term Noise Measurement Results

The quietest hour of the day was selected, assuming the project will run 24 hours as a worst-case scenario, to compare the equivalent ambient levels with the operational noise levels. The quietest levels from the long-term noise data for each location are presented in Table 5.

Table 5: Long-Term Noise Measurement Data ¹				
Date	Location	Adjacent Land use	Label	Leq (dBA)
7/2/2021	South	Industrial	LT-1	59
7/2/2021	West	Residential	LT-2	44
7/2/2021	North	Residential	LT-3	43
Notes: ¹ Long-term noise monitoring locations (LT1, LT2, & LT3) are illustrated in Exhibit E.				

Noise data indicates that the equivalent noise level Leq for the quietest ambient noise levels (worst-case) measured ranges from 43 to 59 dBA at the project site. Measurement location LT-1 represents industrial land use, and LT-2 & LT-3 represents residential uses. Additional field notes and photographs are provided in Appendix A of the Noise Impact Study (Appendix M).

For this evaluation, MD has utilized the quietest level measured Leq and has compared the project's projected noise levels to this level.

Future Noise Environmental Impacts

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

²² Shinohara Industrial Center Project – Evaluation of Changes to Noise Impact Study, City of Chula Vista, CA, prepared by MD Acoustics LLC, March 23, 2022

Operational Noise Impacts

Noise Impacts to Off-Site Receptors Due to Stationary Sources

Sensitive receptors that may be affected by project operational noise include residential uses to the north and west. The worst-case stationary noise was modeled using SoundPLAN acoustical modeling software.

For this study, project activities are assumed to be continuously operational when the noise is intermittent in reality. As a worst-case scenario, the project evaluates the loading dock noise for twenty (25) trucks distributed over loading docks on the east side of the building. In addition, the entrance ramp assumes 20 heavy trucks passing by every hour. Figure 14 shows the site plan with the layout. The project assumes that the industrial facilities will be running 24 hours.

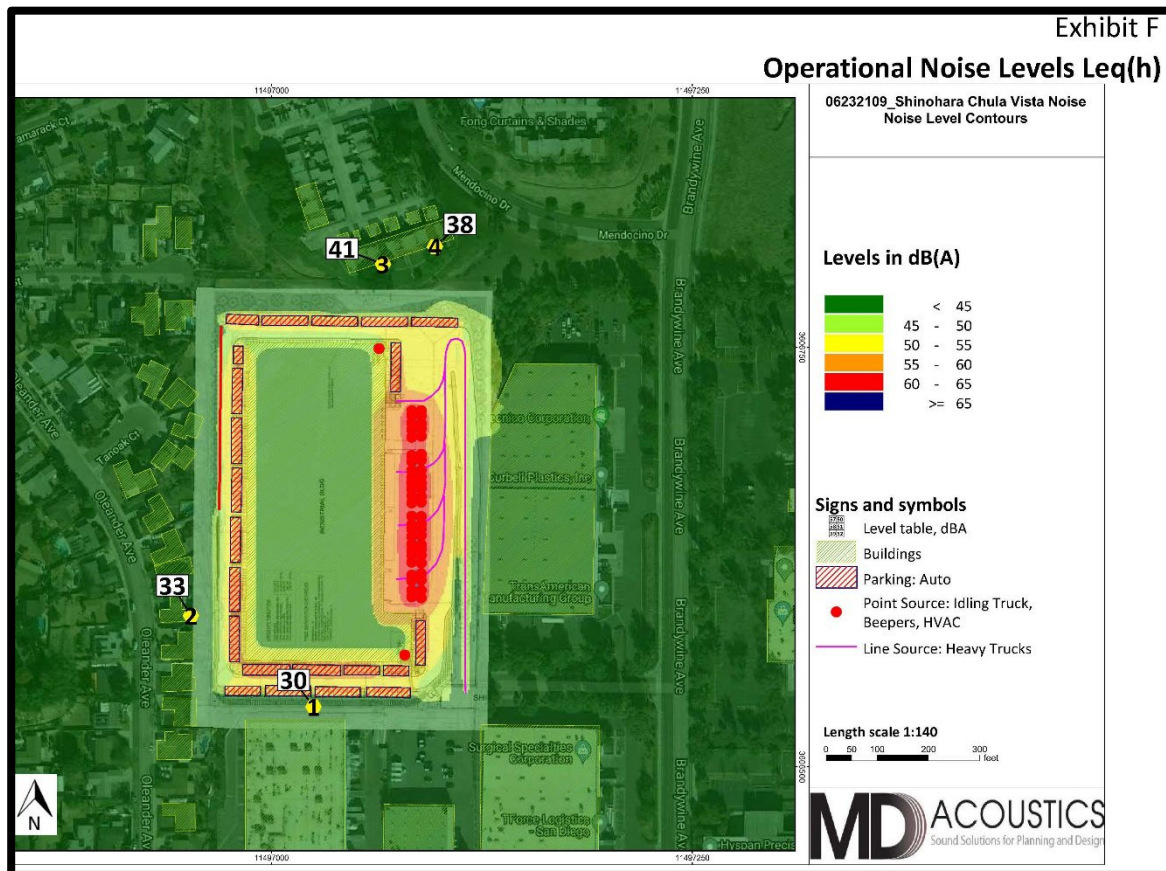
A total of four (4) receptors were modeled to evaluate the proposed project's operational impact. A receptor is denoted by a yellow dot (Exhibit E below). All yellow dots represent either a property line or a sensitive receptor, such as a sensitive outdoor area (courtyard, patio, backyard, etc.).

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



Project Operational Noise Levels

Exhibit F shows the “project only” operational noise levels at the site and illustrates how the noise will propagate at the property lines and/or sensitive receptor area. Operational noise levels at the adjacent uses are anticipated to range between 30 dBA to 41 dBA Leq (depending on the location). The model also considered the elevation differences between the project site and the adjacent residential land uses. Exhibit G shows the 3D rendering of the project site situation relative to the surrounding land uses.



Operational Noise Levels Leq(h) 3D Rendering

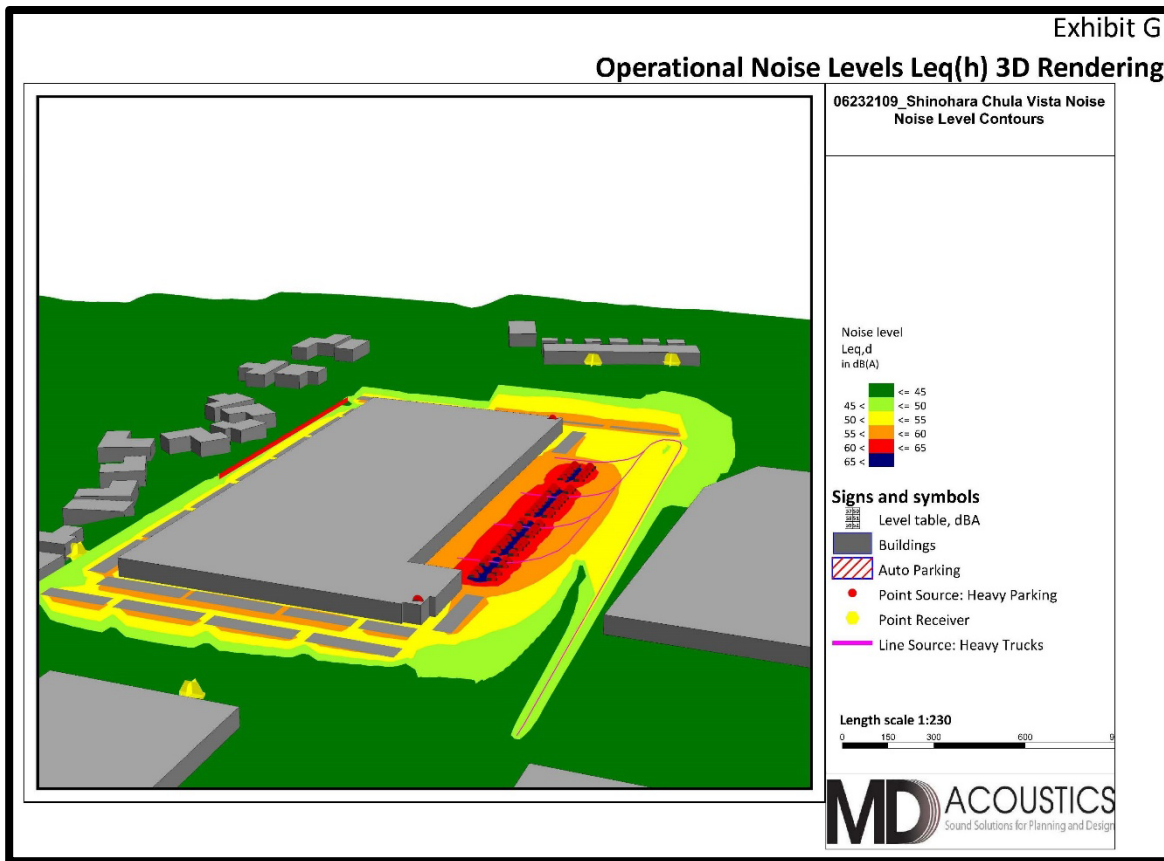
**Project Plus Ambient Operational Noise Levels**

Table 6 demonstrates the project plus the ambient noise levels. Project plus ambient noise level projections are anticipated to range between 44 to 59 dBA Leq depending on location.

Table 6: Worst-case Predicted Operational Leq

Receptor ¹	Floor	Existing Ambient Noise Level (dBA, Leq) ²	Project Noise Level (dBA, Leq) ³	Total Combined Noise Level (dBA, Leq)	Daytime (7AM – 10 PM) Stationary Noise Limit (dBA, Leq) ⁴	Nighttime (10PM – 7AM) Stationary Noise Limit (dBA, Leq) ⁴	Change in Noise Level as Result of Project
1	1	59	30	59	70	70	0
2	1	44	33	44	55	45	0
3	1	43	41	45	55	45	2
4	1	43	38	44	55	45	1

Notes:

¹ Receptors 1 & 5 represent industrial, and receptors 2 thru 4 represent single-family residential.

² Existing ambient taken as 24-hour measurement.

³ See Exhibit F for the operational noise level projections at said receptors.

⁴ Per the City of Chula Vista municipal code 19.68.030(B)(4), if the Ambient level exceeds the limit, the ambient becomes the limit.

As shown in Table 6, the project will meet the City's standard of 45 dBA Leq for residential nighttime operation and 70 dBA for industrial limits.

Table 7 provides the characteristics associated with changes in noise levels.

Table 7: Change in Noise Level Characteristics ¹	
Changes in Intensity Level, dBA	Changes in Apparent Loudness
1	Not perceptible
3	Just perceptible
5	Clearly noticeable
10	Twice (or half) as loud
https://www.fhwa.dot.gov/environMent/noise/regulations_and_guidance/polguide/polguide02.cfm	

In a worst-case scenario, the change in noise level at receivers would fall within the “Not Perceptible” to “Just perceptible” acoustic characteristic for all receiver’s locations.

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

A worst-case project-generated traffic noise level was modeled utilizing the FHWA Traffic Noise Prediction Model - FHWA-RD-77-108. Traffic noise levels were calculated 50 feet from the centerline of the analyzed roadway. The modeling is theoretical and does not consider any existing barriers, structures, and/or topographical features that may further reduce noise levels. Therefore, the levels are shown for comparative purposes only to show the difference with and without project conditions. In addition, the noise contours for 60, 65, and 70 dBA CNEL were calculated. The potential off-site noise impacts caused by an increase in traffic from the operation of the proposed project on the nearby roadways were calculated for the following scenarios:

Existing Year (without Project): This scenario refers to existing year traffic noise conditions.

Existing Year (Plus Project Warehouse use): This scenario refers to existing year + project traffic noise conditions for a warehouse building use.

Existing Year (Plus Project Distribution use): This scenario refers to existing year + project traffic noise conditions for a distribution facility use.

Table 8 compares the without and with project scenario and shows the change in traffic noise levels due to the proposed project. It takes a change of 3 dB or more to hear a perceptible difference. As demonstrated in Table 8, the project is anticipated to change the noise by 2 dBA CNEL in the worst-case scenario.

Although there is an increase in traffic noise levels, the impact is considered to have no impact as the noise levels at or near any existing proposed sensitive receptor would be 66.1. dBA CNEL or less, and the change in noise level is 2 dBA or less.

Table 8: Existing Scenario - Noise Levels Along Roadways (dBA CNEL) Existing Without Project Exterior Noise Levels							
Roadway	Segment	CNEL at 50 Ft (dBA)	Distance to Contour (Ft)				55 dBA CNEL
			70 dBA CNEL	65 dBA CNEL	60 dBA CNEL		
Brandywine Ave	Shinohara Ln to Main St	63.9	12	39	122		385
Existing With Project Exterior Noise Levels							
Roadway	Segment	Project Use	CNEL at 50 Ft (dBA)	Distance to Contour (Ft)			
				70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
Brandywine Ave	Shinohara Ln to Main St	Warehouse	64.4	14	44	138	437
Brandywine Ave	Shinohara Ln to Main St	Distribution	66.1	20	64	203	642
Change in Existing Noise Levels as a Result of Project							
Roadway ¹	Segment	Project Use	CNEL at 50 Feet dBA ²				Potential Significant Impact
			Existing Without Project	Existing With Project	Change in Noise Level		
Brandywine Ave	Shinohara Ln to Main St	Warehouse	63.9	64.4	0.5		No
Brandywine Ave	Shinohara Ln to Main St	Distribution	63.9	66.1	2.2		No
Notes:							
¹ Exterior noise levels calculated at 5 feet above ground level.							
² Noise levels calculated from centerline of subject roadway.							

Construction Noise Impact

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

Construction Noise

The Environmental Protection Agency (EPA) has compiled data regarding the noise-generated characteristics of typical construction activities. The data is presented in Table 9.

Table 9: Typical Construction Equipment Noise Levels ¹	
Type	Lmax (dBA) at 50 Feet
Backhoe	80
Truck	88
Concrete Mixer	85
Pneumatic Tool	85
Pump	76
Saw, Electric	76
Air Compressor	81
Generator	81
Paver	89
Roller	74
Notes:	
¹ Referenced Noise Levels from FTA noise and vibration manual.	

Construction noise is considered a short-term impact, and it is considered exempt from the exterior noise standard per City's code 19.68.060(C)(2). Construction is anticipated to occur during daytime hours. Construction noise will have a temporary or periodic increase in the ambient noise level above the existing within the project vicinity. Furthermore, noise reduction measures are provided to reduce construction

noise further. The impact is considered to have no impact. However, construction noise level projections are provided.

Typical operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Noise levels will be the loudest during the grading phase. A likely worst-case construction noise scenario during grading assumes the use of 1-grader, 1-dozer, 1-excavators, 1-scrapers, and 3-backhoes operating at 293 feet from the nearest sensitive receptor, located adjacent to the west property line. The distance to the nearest sensitive receptor is taken from the center of the project site in order to average the work area where the noise will be produced.

Assuming a usage factor of 40 percent for each piece of equipment, unmitigated noise levels at 293 feet have the potential to reach 68 dBA Leq at the nearest sensitive receptors during grading. Noise levels for the other construction phases would be lower, approximately 65 dBA.

Construction Noise Reduction Policies

Construction operations must follow the City's General Plan and the Noise Ordinance, which states that construction, repair, or excavation work performed must occur within the permissible hours. To further ensure that construction activities do not disrupt the adjacent land uses, the following best management practices/policies shall be taken and will be applied as conditions of approval:

1. Construction shall occur during the permissible hours (7:00 a.m. to 10:00 p.m. on weekdays and 8:00 a.m. to 10:00 p.m. Saturdays and Sundays) as defined in Section 17.24.040(C)(8) of the City's Municipal Code.
2. During construction, the contractor shall ensure all construction equipment is equipped with appropriate noise attenuating devices.
3. The contractor shall locate equipment staging areas that will create the greatest distance between construction-related noise/vibration sources and sensitive receptors nearest the project site during all project construction.
4. Idling equipment shall be turned off when not in use.
5. Equipment shall be maintained to secure vehicles and their loads from rattling and banging.

During the operation and construction of the project, the project will have a **less than significant impact** on the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project.

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

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

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

b) Less than significant impact.

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

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

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

Where: PPV_{ref} = reference PPV at 100ft.

D_{rec} = distance from equipment to receiver in ft.

$n = 1.1$ (the value related to the attenuation rate through ground)

The thresholds from the Caltrans Transportation and Construction Induced Vibration Guidance Manual in Table 10 (below) provide general thresholds and guidelines as to the vibration damage potential from vibratory impacts.

Table 10: Guideline Vibration Damage Potential Threshold Criteria		
Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5
Source: Table 19, Transportation and Construction Vibration Guidance Manual, Caltrans, Sept. 2013. Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.		

Table 11 gives approximate vibration levels for particular construction activities. The data provides a reasonable estimate for a wide range of soil conditions.

Table 11: Vibration Source Levels for Construction Equipment ¹		
Equipment	Peak Particle Velocity (inches/second) at 25 feet	Approximate Vibration Level LV (dVB) at 25 feet
Pile driver (impact)	1.518 (upper range)	112
	0.644 (typical)	104
Pile driver (sonic)	0.734 upper range	105
	0.170 typical	93
Clam shovel drop (slurry wall)	0.202	94
Hydromill	0.008 in soil	66
(slurry wall)	0.017 in rock	75
Vibratory Roller	0.21	94
Hoe Ram	0.089	87
Large bulldozer	0.089	87
Caisson drill	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58
¹ Source: Transit Noise and Vibration Impact Assessment, Federal Transit Administration, May 2006.		

A large bulldozer would yield a worst-case 0.006 PPV (in/sec) which may be perceptible for short periods during grading along property lines of the project site but is below any threshold of damage, considering the adjacent residential to the west are at a distance of 293-feet from the project site's center. At 30 feet from the property line, the vibration level is about 0.073 in/sec PPV. A vibration level of this scale may be perceptible for short periods of time but is below any threshold of damage. The project will have a **less than significant**, and no mitigation is required.

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

RMS – Known as the root mean squared (RMS), can denote vibration amplitude.

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

- c) **No impact.** The project is in Area 2 of the Brown Field Municipal Airport Land Use Compatibility Plan (ALUCP). It is not within the noise contours of the ALUCP. The project will have **no impact** on exposing people residing or working in the area to excessive noise levels.

Mitigation: No mitigation measures are required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. POPULATION AND HOUSING. Would the project:				
d) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of road or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments:

- a) **Less than significant impact.** The project will not induce growth as it is consistent with the City's General Plan Chula Vista Vision 2020 policies for commercial development along major roadways. The City's General Plan Chula Vista Vision 2020 establishes the City's development potential to accommodate the City's growth. As proposed, the project will help accommodate that growth but will not induce it.

The development of the site will result in industrial buildings. The project site is located on existing streets, and utilities and public facilities are all available in the immediate area. No new road or utility infrastructure is required. Therefore, project-related impacts are expected to be **less than significant**, directly, indirectly, or cumulatively.

- b) **Less than significant impact.** The project site is vacant and will not displace any persons or require the construction of replacement housing. In addition, the project site is Zoned IL – Limited Industrial. Therefore, there is **no impact** on housing directly, indirectly, or cumulatively.

Mitigation: No mitigation measures are required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. PUBLIC SERVICES. Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the 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:				
i. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments:

- a)
- i) **Less than significant impact.** The project site would be served by the Chula Vista Fire Department (CVFD), which has ten (10) fire stations and approximately 170 personnel ([City of Chula Vista 2021](#)). As part of standard development practices, prior to construction, project plans will be reviewed by the CVFD, and the project will be required to incorporate the CVFD's recommendations into the final project design. The CVFD review and approval of plans would ensure that the project complies with the California Fire Code (24 CCR, Part 9). The project applicant will be required to install fire alarms and sprinklers to improve safety and emergency response.

The project will be required to pay development impact fees (DIF) related to fire protection. The fire protection facility DIF fees are determined based on the City's Master Fee Schedule. These fees would provide funding for capital improvements such as land, equipment purchases, and fire station construction.

Operations of the project would involve the development of an industrial building. Project construction could result in additional emergency calls to this location but is not anticipated to increase the overall demand for fire protection and services to the degree that new or improved facilities would be required. Implementation of the project would not result in a substantially increased demand for fire protection services. Therefore, impacts associated with fire protection would be **less than significant**, directly, indirectly, and cumulatively.

- ii) **Less than significant impact.** The project will be served by Chula Vista Police Department (CVPD), currently employing approximately 270 sworn officers ([City of Chula Vista 2021](#)). The project will be required to pay a development impact fee (DIF) related to police services. The police protection facility DIF fees are determined based on the City's Master Fee Schedule. These fees would provide funding for capital improvements for police services. Project construction could result in additional enforcement calls and emergency responses to this location but is not anticipated to increase the overall demand for law enforcement personnel and services in the project area such that new or improved facilities would be required. The CVPD has a goal to meet all Priority 1 Emergency calls (life-threatening) within six (6) minutes and all Priority 2 Emergency calls (urgent calls) within 7.5 minutes.

The project would involve the development of an industrial building. Project construction could result in additional enforcement calls and emergency responses to this location but is not anticipated to increase the demand for law enforcement personnel and services such that new or improved facilities would be required. Therefore, the implementation of the project would not substantially increase the demand for police protection services. Therefore, impacts associated with police protection would be **less than significant**, directly, indirectly, and cumulatively.

- iii) **No impact.** The project is in the Sweetwater Union High School District (SUHSD) and the Chula Vista Elementary School district (CVESD). The project would not directly or indirectly increase the population. Construction and operational workers would come from the local labor pool or commute from the San Diego region. The project would not substantially increase enrollment at schools. Therefore, **no impacts** associated with schools would occur directly, indirectly, or cumulatively.
- iv) **No impact.** The project will add new residents to the area, and thus use of parks is not anticipated to increase because of the project. Construction and operational workers would come from the local labor pool or commute from the San Diego region. Therefore, the project would not result in a substantial increase in demand on parks or create adverse physical impacts on parks, and **no impact** will occur directly, indirectly, or cumulatively.
- v) **No Impact.** The project would not increase the population as construction and operational workers would come from the local labor pool or commute from the San Diego region. The project would not increase enrollment at schools or patronage at parks, libraries, community centers, or other public facilities. Therefore, **no impacts** on other public facilities would occur directly, indirectly, or cumulatively.

Mitigation: No mitigation measures are required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. RECREATION. Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
that substantial physical deterioration of the facility would occur or be accelerated?				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments:

- a) **Less than significant impact.** The project would not result in population growth, as construction and operational workers would come from the local labor pool or commute from the San Diego region. It is not anticipated that people would relocate to the City due to the construction or operation of the project. Therefore, the project is not expected to cause any substantial physical deterioration to nearby recreational facilities. Workers from the project may use the local parks during breaks and lunches, but their use will be minimal. Therefore, no significant increased usage of existing neighborhoods, regional parks, or other recreational facilities is expected to occur due to the project, and a **less than significant** impact would arise directly, indirectly, or cumulatively.
- b) **No Impact.** The project will consist of a warehouse/distribution building that does not include recreational facilities. The project will not increase the area's population and require the construction or expansion of recreational facilities. Therefore, the project will have **no impact**, directly, indirectly, or cumulatively on the requirement for additional recreational facilities.

Mitigation: No mitigation measures are required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION. Would the project:				
a) Conflict with program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b) ?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Comments:

The Local Mobility Analysis Chula Vista Nirvana, prepared by Linscott Law & Greenspan Engineers, July 19, 2022 (Appendix O), has found the project will have a less than significant impact on transportation.

a) **Less than significant impact.**

GENERAL PLAN CHULA VISTA VISION 2020 – CIRCULATION ELEMENT

The project is located at 517 Shinohara Lane and will take access from a driveway at the terminus of Shinohara Lane. Roadways that the project may impact are listed here.

Olympic Parkway is classified as a six (6) Lane Prime in the City of Chula Vista General Plan Land Use and Transportation Element. It is currently constructed as a six-lane divided roadway. Sidewalks are provided on both sides of the roadway. Class II bike lanes are provided on both sides of the roadway. Curbside parking is not permitted. The posted speed limit is 45 mph west of Brandywine Avenue and 50 mph east of Brandywine Avenue.

Shinohara Lane is a non-classified roadway in the City of Chula Vista General Plan Land Use and Transportation Element. It is currently constructed as a two-lane undivided roadway with a curb-to-curb width of approximately 40 feet. Sidewalks are provided on both sides of the roadway, and bike lanes are not provided. Curbside parking is permitted on both sides of the roadway. There is no posted speed limit.

Main Street is classified as a six (6) Lane Prime in the City of Chula Vista General Plan Land Use and Transportation Element. It is currently constructed as a six-lane divided roadway. Sidewalks are provided on both sides of the roadway. Class II bike lanes are provided on both sides of the roadway. Curbside parking is not permitted. The posted speed limit west of I-805 northbound ramps is 40 mph. Between I-805 northbound ramps and Brandywine Avenue, the speed limit is 45 mph and 50 mph east of Brandywine Avenue.

Main Court is a non-classified roadway in the City of Chula Vista General Plan Land Use and Transportation Element. It is currently constructed as a two-lane undivided roadway. Sidewalks are not provided on either side of the roadway. Bike lanes are not provided. Curbside parking is not permitted. There is no posted speed limit.

Oleander Avenue is a non-classified roadway in the City of Chula Vista General Plan Land Use and Transportation Element. It is currently constructed as a two-lane undivided roadway. Sidewalks are provided on both sides of the roadway. Bike lanes are not provided on either side of the roadway. Curbside parking is permitted on both sides of the roadway. The posted speed limit is 25 mph.

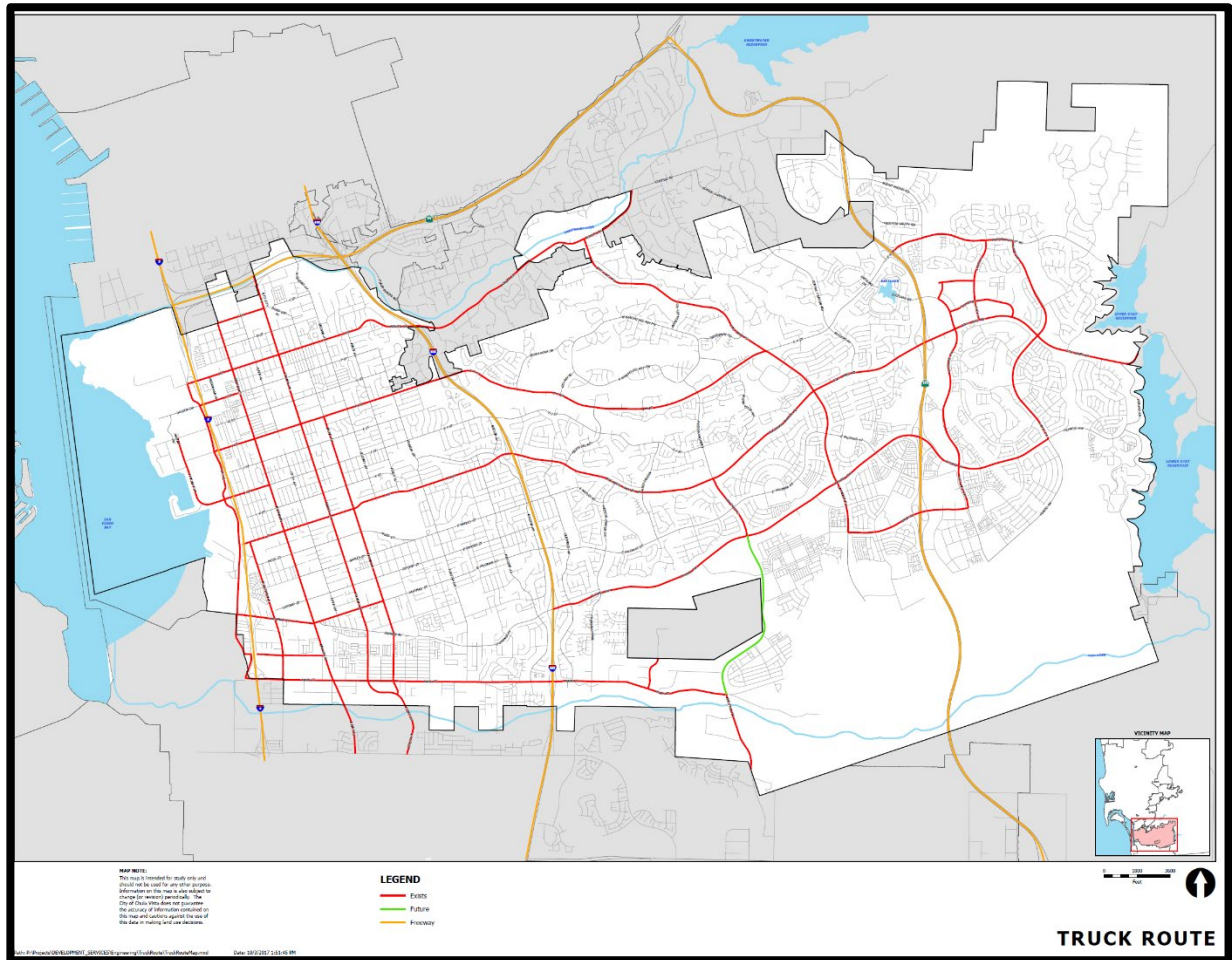
Brandywine Avenue is classified as a Class I Collector in the City of Chula Vista General Plan Land Use and Transportation Element. It is currently constructed as a two-lane undivided roadway between Olympic Parkway and Sonora Drive. Brandywine Avenue is built between Sonora Drive and Mendocino Drive as a two-lane undivided roadway with a two-way left-turn lane. It is constructed as a four-lane undivided roadway with a two-way left-turn lane between Mendocino Drive and Main Street. Sidewalks are provided on both sides of the roadway. Class II bike lanes are provided on both sides of the roadway. Curbside parking is permitted on both sides of the roadway between Olympic Boulevard and Mendocino Drive. The posted speed limit is 35 mph.

Auto Park Place is a non-classified roadway in the City of Chula Vista General Plan Land Use and Transportation Element. It is currently constructed as a two-lane undivided roadway with a two-way left-turn lane. Sidewalks are provided on both sides of the roadway, and bike lanes are not provided. Curbside parking is permitted on both sides of the roadway. There is no posted speed limit.

These roadways are consistent with the General Plan Chula Vista Vision 2020 – Circulation Element.

Trucks

As noted in the City of Chula Vista General Plan Land Use and Transportation Element, page LUT-81, “Chula Vista has designated select roadways as truck routes to provide for the regulated movement of trucks throughout the City. This is intended to route truck traffic to those streets where neighborhood intrusion, noise, and other potential impacts are minimized. Roadways providing access to the freeways and major activity centers are the most likely candidates for truck route designation. The designation of truck routes does not prevent trucks from using any other streets to make deliveries or for other reasons, as defined in the Vehicle Code of the State of California.”



The City will encourage future tenants to instruct truck drivers to turn south off Shinohara Lane onto Brandywine Avenue to get to the closest Truck Route, Main Street, thereby avoiding residential areas to the north on Brandywine Avenue.

The project will not cause a conflict with the City of Chula Vista General Plan Land Use and Transportation Element.

CHULA VISTA ACTIVE TRANSPORTATION PLAN

Pedestrian Mobility

Shinohara Lane – Within the study area, Shinohara Lane currently provides contiguous sidewalks on the north side only.

Brandywine Avenue – Within the study area, Brandywine Avenue currently provides contiguous sidewalks on both sides.

The nearest signalized intersection is less than ½ mile south of the project site, at the Main Street/Brandywine Avenue intersection, and provides a controlled crossing location with pedestrian push buttons and crosswalks.

Main Street – Within the study area, Main Street currently provides contiguous sidewalks on the north side and non-contiguous sidewalks on the south side. Signalized intersections are less than ½ mile apart along Main Street and provide a controlled crossing location with pedestrian push buttons and crosswalks.

Based on the City of Chula Vista Active Transportation Plan, no sidewalk improvements are planned within ½ mile of the project site. The project will generate minimal walking trips.

Bicycle Mobility

A bicycle network inventory was conducted for the study area. Based on the City of Chula Vista General Plan review, a Class II bike lane is provided along Main Street and Brandywine Avenue within the study area. There are currently no bike lanes or bike routes on Shinohara Lane within the study area.

Based on the City of Chula Vista Active Transportation Plan, a Class IV Cycle Track is planned to be constructed on Brandywine Avenue between Palomar Street and Main Street and Olympic Parkway east of Brandywine Avenue.

Transit Mobility

The nearest bus stop is approximately 1/5 mile (approximately 5 minutes of walk time) from the project site, at the Main Street/Brandywine Avenue intersection. There are multiple bus stops along Main Street and Brandywine Avenue. These stops are served by MTS bus route 704, which runs from the E Street Transit Center to the Palomar Street Transit Center. MTS bus route 704 runs along 3rd Avenue, Naples Street, Brandywine Avenue, Main Street, and Orange Avenue. Weekday service begins at 5:22 a.m. with 30-minute headways and ends at 9:53 p.m. Saturday service begins at 5:51 a.m. with 1-hour headways and ends at 9:19 p.m. Sunday service begins at 7:22 a.m. with 1-hour headways ends at 6:54 p.m. Appendix G of the Local Mobility Analysis (Appendix O) contains the bus route schedule and map.

OTHER PLANS

City Capital Improvement Program (CIP)

A review of the interactive [GIS Map of City CIP Projects](#) accessed on December 14, 2021, indicates that Main Street was designed for widening on the south side between Nirvana Avenue and Heritage Road to a six-lane major as part of the 2015/16 program with the buildout of streets and pavement occurring in 2020. No other CIP projects are proposed in the project area, and the project will not conflict with this program.

Congestion Management Plan (CMP) & Regional Transportation Plan (RTP)

The San Diego Association of Governments (SANDAG) meets the federal congestion management provisions through existing SANDAG planning and performance monitoring activities, such as the Regional Transportation Plan (RTP) and other multimodal performance monitoring efforts. Federal congestion management provisions are more flexible and utilize the RTP as the primary tool to solve congestion. The RTP includes identifying and evaluating anticipated performance and expected benefits of appropriate congestion management strategies (demand management, operational improvements, transit improvements, systems management improvements, etc.). Since the City and SANDAG work

together for consistency between the City’s General Plan Chula Vista Vision 2020 and SANDAG’s 2014 Regional Transportation Plan (RTP), and the project is consistent with the City’s General Plan Chula Vista Vision 2020, it is also consistent with the CMP and RTP.

SUMMARY

As designed and conditioned, the project will not conflict with any of the above-noted plans, ordinances, or policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. It will have a **less than significant** impact directly, indirectly, or cumulatively.

- b) **Less than significant impact.** Per the City of Chula Vista Transportation Study Guidelines:

“Industrial Employment projects located within a VMT-efficient area may be presumed to have a less than significant impact absent substantial evidence to the contrary. A VMT-efficient area for industrial employment projects is any area with an average VMT/Employee at or below the baseline regional average for the census tract it is located within.”

The project is located in a VMT efficient area (at or below the base year average VMT/employee) based on the applicable location-based screening map produced by SANDAG. The baseline average regional VMT/employee is 18.9 per the SANDAG Series 14 (Year 2016) ABM2+ data.

Using the SANDAG screening map for industrial projects under “per employee measurements,” the project would be expected to generate 15.32 VMT/employee. Per the City’s Transportation Study Guidelines (June 202, Updated January 2022), the project would not require a VMT analysis, and the project is presumed to have a **less than significant** VMT impact. Table 4–1 shows the VMT analysis results. Appendix B of the Local Mobility Analysis (Appendix O) includes the two SANDAG screening maps.

TABLE 4-1 PROJECT VEHICLE MILES TRAVELED ANALYSIS		
VMT per Employee		
Geography	VMT per Employee	Exceeds Threshold?
San Diego Region	18.9	--
<i>Significance Threshold for Industrial Employment (at Regional Average VMT)</i>	18.9	--
Project Site		
Chula Vista Shinohara	15.32	No
Source: SANDAG VMT Employee Screening Tool for the City of Chula Vista		

- c) **Less than significant impact.** The project site takes access via a driveway at the terminus of Shinohara Lane. The driveway will be constructed in compliance with recommended roadway classifications and respective cross-sections in the City of Chula Vista General Plan Chula Vista Vision 20 or as directed by the City. The City Engineer will review the project site plan for sight distance at the access point with respect to standard Caltrans and City sight distance standards. In addition, further review will take place at the time of final grading, landscaping, and street improvement plans. Signing/stripping will be implemented in conjunction with detailed construction plans for the project site.

In addition, Linscott Law & Greenspan (LLG) performed a field survey (not an engineering survey) to determine whether or not the minimum required intersection sight distances can be achieved for drivers turning left from Shinohara Lane. Per the *AASHTO Geometric Design of Highways and Street Manual*, the point of observation for their review is offset 14.5 feet from the edge of the traveled way. The driver’s eyes are measured at 3.5 feet from the ground surface, and the object to be observed is also 3.5 feet from the ground. The location of the object to be observed is located in the middle of the travel lane.

Based on the proposed traffic control, the appropriate sight distance formula would reflect the left-turn from the minor road with stop control and represent the appropriate constraint on drivers leaving the project site. The formula below has variables that are dependent on the design speed of the major road (V_{major}) and expected maneuver time (t_g) pertaining to each specific turning movement.

Per the above guidelines, the intersection distance for both left and right approaches of the minor leg need to be determined for vehicles turning left out of Shinohara Lane. Looking left from the driveway, the minimum required intersection sight distance is 540 feet, and looking right from the driveway towards the westbound approach, the sight distance is 592 feet. Based on field observations, sight distance requirements are met for both southbound (540 feet), and northbound (592 feet) approaches (Appendix O Page 28).

The project will have a **less than significant** impact, directly, indirectly, or cumulatively, on creating or increasing hazards or incompatible uses with the above provisions.

- d) **Less than significant impact.** The project site takes access via a driveway at the terminus of Shinohara Lane. Emergency access to the site will be provided during the development's construction and operational phases. As designed, the project will be reviewed for both on-site and off-site safety hazards by Engineering and Fire to ensure adequate emergency access. The project will have **less than significant impact** on emergency access, directly, indirectly, or cumulatively.

Mitigation: No mitigation measures are required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. TRIBAL CULTURAL RESOURCES –				
Would the project:				
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) 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 Section 5020.1(k) , or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1 . In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1 , the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Comments:

- a)
- i) **Less than significant impact.** Due to the lack of cultural resources within the project area and the previous amounts of disturbance from earlier grading activities, the potential of intact subsurface resources within the project area is low. Archaeological and Native American monitoring during construction and grading activities is not recommended. (page iii - iv Archaeological Resources Survey Report (Appendix E)). Therefore, the project will have a **less than significant impact** on causing a substantial adverse change to a significant archaeological resource. See Section V – Cultural Resources for impacts on cultural resources.
 - ii) **Less than significant impact.** Pursuant to California Public Resources Code Section 21080.3.1 (Assembly Bill 52), California Native American tribes traditionally and culturally affiliated with the project area can request notification of projects in their traditional cultural territory. No tribes have requested notification from the City of Chula Vista.

Mitigation: No mitigation measures are required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS.				
Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Comments:

a) Less than significant impact.

Water

The Otay Water District will provide potable water to the project site via an existing 12-inch potable main within Shinohara Lane. On September 9, 2021, the Otay Water District provided a “Will Serve Letter”; therefore, the project would have a **less than significant impact** on the need to relocate or construct new or expanded wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects.

Wastewater

The project will connect to the existing 8-inch sewer easement between 690 Brandywine Avenue and 515 Main Street, connecting a 10-inch diameter sewer along Main Street, a tributary to the Main Street Sewer Basin.

The project’s anticipated average dry weather flow (ADWF) is estimated to be 14,000 gallons per day (gpd). This estimated ADWF is computed using a sewer generation rate of 80 gpd per 1,000 square feet of building square footage for industrial land use from Table 3-2 of the City’s May 2014 final Wastewater Collection System Master Plan. (175,000 SF/1,000 SF x 80 gpd/1,000 SF).

Per the letter dated August 30, 2021, from the Department of Engineering & Capital Projects, the City currently has wastewater treatment capacity rights in the City of San Diego Metro (“Metro”) system. The letter goes on to state, “The City’s current treatment capacity rights in the Metro system (20.864 mgd) are adequate to support the City’s projected build-out flows based on the current wastewater generation per equivalent dwelling unit and anticipated growth (City of Chula Vista Growth Management Oversight Committee 2020 Annual Report for Fiscal Year 2020).” Therefore, the project would have a **less than significant impact** on the need to relocate or construct new or expanded wastewater treatment facilities, the construction or relocation of which could cause significant environmental effects.

Stormwater Drainage

As discussed in Section X – Hydrology and Water Quality, the proposed site will consist of two (2) major drainage basins with two (2) discharge locations to mimic existing conditions. The site grading and onsite storm drain system have been designed to avoid drainage diversion.

The proposed site will consist of two (2) major drainage basins with two (2) discharge locations that match the existing drainage discharge points and pre-project peak flow rates for Existing Drainage Basins A and B. The proposed project’s area in the northwesterly corner of the project site that comprised Existing Drainage Basin C is proposed to be included in Proposed Drainage Basin A. This design will enable the proposed project to collect and convey runoff from this location to the project’s peak flow detention facility and stormwater treatment and no longer discharge runoff on an existing single-family residential property. While the size of Proposed Drainage Basin A is larger than the size of Existing Drainage Basin A when comparing areas, the proposed project will provide peak flow detention, so the peak flow runoff rate from this basin for the post-project condition will be equal to or less than the pre-project condition.

Stormwater runoff from a majority of the proposed development (DMA-A) is routed to a series of BMPs, including a Contech CDS pretreatment unit, a StormTrap underground detention vault, and a BioClean Modular Wetland System (MWS). The underground detention vault has been designed to meet 100-year peak flow detention requirements. The Modular Wetland System is designed as a proprietary biofiltration BMP for stormwater treatment. Outflows from the detention vault and MWS are discharged through a proposed storm drain pipe to the existing Type F catch basin at the southern property boundary.

Stormwater is then conveyed through the neighboring property to the south through an existing private storm drain and outlets onto Main Street as in existing conditions.

Stormwater runoff from the proposed driveway (DMA-B) will be drained to a Modular Wetland System for stormwater treatment. The MWS will be designed with a 3-foot-wide curb inlet opening and a 1-inch local curb depression to capture the required water quality flow. Runoff that exceeds the water quality flow rate or capacity of the MWS will flow by the MWS and drain to the existing concrete drainage channel at the southeast corner of the project site. Outflows from the MWS will be pumped to a proposed curb outlet along the southern property boundary and discharged to the existing concrete drainage channel. As in existing conditions, the concrete drainage channel discharges onto Main Street via the curb outlet. The characteristic of existing stormwater flows through the neighboring property will not change as a result of the proposed project.

Runoff from the cut slope at the northwest portion of the project site will be conveyed via the proposed brow ditch to the existing Type F catch basin at the southern property boundary. This area (DMA-C) is considered a Self-Mitigating DMA per Chapter 5.2.1 of the City of Chula Vista BMP Design Manual.

All project site runoff is discharged onto Main Street as in existing conditions. Flow travels west via concrete curb and gutter from Main Street to an existing curb inlet. Stormwater is then conveyed south through an existing storm drain and outlets over the headwall into the Otay River. The Otay River travels west and outlets at the San Diego Bay and, ultimately, the Pacific Ocean. The Otay River is considered an exempt river reach per the Watershed Management Area Analysis (WMAA). Therefore, the project is exempt from hydromodification management requirements because the project directly discharges into an exempt river reach via a hardened conveyance (a combination of a private and public storm drain system).

The underground detention vault has been designed to provide flow control in the form of volume reduction and peak flow attenuation. The vault has been modified to include a low-flow and mid-flow orifice outlet and an overflow weir to control peak flows. The required water quality treatment flow is diverted to the downstream Modular Wetland System in accordance with Worksheet B.5-5 of the City of Chula Vista BMP Design Manual. Overflow relief for the 100-year storm event is provided with a partition weir installed within the vault and discharged directly to the existing Type F catch basin at the southern property boundary (pages 5 – 7 Preliminary Drainage Study (Appendix K)).

Therefore, the project would have a **less than significant impact** on the need to relocate or construct new or expanded stormwater drainage facilities, the construction or relocation of which could cause significant environmental effects.

Electric Power, Natural Gas & Telecommunications

The project will connect to existing electric power and natural gas facilities through San Diego Gas and Electric (SDG&E). On June 29, 2021, SDG&E provided a “Will Serve” for the project.

The annual natural gas and electricity demands have been provided per the CalEEMod output from the Air Quality, Greenhouse Gas, and Health Risk Impact Study (Appendix C). They are provided in Table 9 of the CEQA Energy Review (Appendix F).

Table 9: Project Annual Operational Energy Demand Summary ¹	
Natural Gas Demand	kBTU/year
Unrefrigerated Warehouse - No Rail	293,957
Total	293,957

Electricity Demand	kWh/year
Unrefrigerated Warehouse - No Rail	632,454
Parking Lot	30,940
Total	663,394

Notes:
¹ Taken from the CalEEMod 2020.4.0 annual output in the Shinohara Industrial Project Air Quality, Greenhouse Gas, and Health Risk Impact Study (Appendix C).

As shown in Table 9, the estimated electricity demand for the project is approximately 736,163 kWh per year. In 2020, the non-residential sector of the County of San Diego consumed approximately 11,658 million kWh of electricity.²³ In addition, the estimated natural gas consumption for the project is approximately 322,106 kBTU per year. In 2020, the non-residential sector of the County of San Diego consumed approximately 202 million therms of gas.²⁴ Therefore, the project's increase in electricity and natural gas demand is insignificant compared to the County's 2019 non-residential sector demand.

Telecommunications will be provided via AT&T. The project would have a **less than significant impact** on the need to relocate or construct new or expanded electric power or natural gas facilities, the construction or relocation of which could cause significant environmental effects.

Internet and Cable Facilities

Cox Communications will provide internet and cable services to the project. Cox has cable facilities located in the area that can be extended to the project. Cox will coordinate system design changes required to extend their system to the project. Cox Communications provided a "Will Serve" letter for the project on October 4, 2021.

Therefore, the project would have a **less than significant impact** on the need to relocate or construct new or expanded internet or cable facilities, the construction or relocation of which could cause significant environmental effects.

- b) **Less than significant impact.** The Otay Water District (OWD) is responsible for supplying potable water to the project site and its region. As discussed in the San Diego County 2020 [Urban Water Management Plan](#) (UWMP), adequate water supplies are projected to be available to meet Otay Water District's estimated water demand through 2045 under normal, historic single-dry, and historic multiple-dry year conditions (pages ES-6 and ES-7). OWD forecasts for projected water demand are based on the population projections of SANDAG, which rely on the adopted land use designations contained within the general plans that cover the geographic area within OWD's service area. The water use projections utilized in the San Diego County 2020 UWMP were based on the site's existing industrial land use designation on the City's Land Use Map. OWD will have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. The project will have a **less than significant impact**.

Less than significant impact. The project's anticipated average dry weather flow (ADWF) is estimated to be 14,000 gallons per day (gpd). This estimated ADWF is computed using a sewer generation rate of 80 gpd per 1,000 square feet of building square footage for industrial land use from Table 3-2 of the City's May 2014 final Wastewater Collection System Master Plan. (175,000 SF/1,000 SF x 80 gpd/1,000 SF).

²³ California Energy Commission, Electricity Consumption by County. <https://ecdms.energy.ca.gov/elecbycounty.aspx>

²⁴ California Energy Commission, Gas Consumption by County. <http://ecdms.energy.ca.gov/gasbycounty.aspx>

Under existing conditions, City currently has 20.86 million gallons per day (mgd) of allocated wastewater treatment capacity rights in the Metro system and generates about 16 mgd. The City could reach 22 mgd in the next decade based on current trends. The City is exploring options for increasing capacity at this time (City of Chula Vista [Water Reclamation Facility Feasibility Study](#) – Accessed December 15, 2021).

Implementation of the project would utilize approximately 1% of the treatment capacity. Accordingly, sufficient capacity to treat wastewater generated by the project and existing commitments exist. The project would not require new or expanded wastewater facilities (such as conveyance lines, treatment facilities, or lift stations). However, as previously stated, the City is aware that additional capacity will be needed in the next ten years. Because there is adequate capacity at the existing treatment facility to serve the project's projected sewer demand, impacts would be **less than significant**.

- c) **Less than significant impact.** Implementation of the project would generate an incremental increase in solid waste volumes requiring off-site disposal during short-term construction and long-term operational activities.

According to the San Diego County Integrated Waste Management Plan 5-Year Review Report 2017, approved in January 2018, solid waste from Chula Vista is landfilled at the Otay Landfill (Closure Date 2030). After the closure of the Otay Landfill, the project site area will be served by the Sycamore Landfill (Closure Date: 2054, with plans to extend the date of closure through expansion). The two landfills have 131.1 million cubic yards of remaining capacity. Therefore, the region has more than adequate landfill capacity to serve the City of Chula Vista's disposal needs for the foreseeable future. The project would not generate solid waste in excess of state or local standards or excess of local infrastructure capacity, or otherwise, impair the attainment of solid waste reduction goals. Therefore, the impacts would be **less than significant**.

- d) **Less than significant impact.** All land uses that generate waste must coordinate with the City's contracted waste hauler to collect solid waste on a standard schedule established in applicable local, regional, and state programs. Additionally, all development within the City must comply with applicable state requirements for recycling and waste reduction and other local and federal solid waste disposal standards, thereby ensuring that the solid waste sent to landfills is reduced according to existing regulations. Therefore, impacts related to compliance with federal, state, and local management and reduction statutes and regulations pertaining to solid waste are considered **less than significant**, directly, indirectly, or cumulatively.

Mitigation: No mitigation measures are required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. WILDFIRE – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
other utilities) that may exacerbate fire risk, or that may result in temporary or ongoing impacts on the environment?				
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments:

- a) **No impact.** The City of Chula Vista does not have an adopted emergency response plan or emergency evacuation plan. However, the City of Chula Vista Fire Department has the following scenarios that require disaster preparedness: wildfire, earthquakes, flood, terrorism, and tsunami. The only scenario with an evacuation route map is the tsunami scenario. The evacuation routes are along the coast and direct evacuees inland. According to the tsunami evacuation map, a tsunami would not affect the project site.

A driveway will provide project access at the terminus of Shinohara Lane. The road is an existing street within the City's established street system. The project will not significantly alter the road or the current circulation pattern in the area.

Construction activities may temporarily restrict vehicular traffic. However, even temporary changes to the existing roadway network require the approval of the City and notification to all emergency responders.

The project provides adequate emergency vehicle access, including street widths and vertical clearance. Implementing federal, state, and local laws and regulations in the project's construction would result in **no impact**, directly, indirectly, or cumulatively, on adopted emergency response or evacuation plans.

- b) **No impact.** A review of Figure 9-7 – Geologic Hazards of the General Plan Chula Vista Vision 2020 (page E-55) found that the project site was not in a landslide hazard area or an area of steep slopes. However, steep slopes and retaining walls will be created. All walls will be designed and constructed per the recommendations of the Geotechnical Investigation and the California Building Code. The project's landscape plan and maintenance will create a defensible space, changing the existing natural slope conditions to a defensible slope conditions. The project will have **no impact** on exposing project occupants to pollutant concentrations from a wildfire or the uncontrolled wildfire spread.
- c) **No impact.** The project will not require installing or maintaining associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or result in temporary or ongoing environmental impacts. The project is in an industrial park area and is zoned and planned for industrial uses.
- d) **No impact.** The project will not expose people or structures to significant risks, including downslope or downstream flooding or landslides, because of runoff, post-fire slope instability, or drainage changes. The project will include a graded pad for the buildings with retaining walls. All walls will be designed and constructed per the recommendations of the Geotechnical Investigation and the California Building Code. The project's landscape plan and maintenance will create a defensible space, changing the existing natural slope conditions to a defensible slope conditions. The project will have **no impact** on exposing people or structures to significant risks, including downslope or downstream flooding or landslides, because of runoff, post-fire slope instability, or drainage changes.

Mitigation: No mitigation measures are required.

Issues:**Potentially
Significant
Impact****Less Than
Significant
With
Mitigation
Incorporated****Less Than
Significant
Impact****No Impact****XXI. THRESHOLDS**

Will the proposal adversely impact the City's Threshold Standards?

A. Library

The City shall construct 60,000 gross square feet (GSF) of additional library space, over the June 30, 2000, GSF total, in the area east of Interstate 805 by buildout. The construction of said facilities shall be phased such that the City will not fall below the city-wide ratio of 500 GSF per 1,000 population. Library facilities are to be adequately equipped and staffed.

☐☐☐☒**B) Police**

a) Emergency Response: Properly equipped and staffed police units shall respond to 81 percent of "Priority One" emergency calls within seven (7) minutes and maintain an average response time to all "Priority One" emergency calls of 5.5 minutes or less.

☐☐☐☒

b) Respond to 57 percent of "Priority Two" urgent calls within seven (7) minutes and maintain an average response time to all "Priority Two" calls of 7.5 minutes or less.

C) Fire and Emergency Medical

Emergency response: Properly equipped and staffed fire and medical units shall respond to calls throughout the City within 7 minutes in 80% of the cases (measured annually).

☐☐☐☒**D) Traffic**

The Threshold Standards require that all intersections must operate at a Level of Service (LOS) "C" or better, with the exception that Level of Service (LOS) "D" may occur during the peak two hours of the day at signalized intersections. Signalized intersections west of I-805 are not to operate at a LOS below their 1991 LOS. No intersection may reach LOS "E" or "F" during the average weekday peak hour. Intersections of arterials with freeway ramps are exempted from this Standard.

☐☐☐☒**E) Parks and Recreation Areas**☐☐☐☒

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
The Threshold Standard for Parks and Recreation is 3 acres of neighborhood and community parkland with appropriate facilities /1,000 population east of I-805.				
F) <u>Drainage</u>				
The Threshold Standards require that stormwater flows and volumes not exceed City Engineering Standards. Individual projects will provide necessary improvements consistent with the Drainage Master Plan(s) and City Engineering Standards.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
G) <u>Sewer</u>				
The Threshold Standards require that sewage flows and volumes not exceed City Engineering Standards. Individual projects will provide necessary improvements consistent with Sewer Master Plan(s) and City Engineering Standards.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
H) <u>Water</u>				
The Threshold Standards require that adequate storage, treatment, and transmission facilities are constructed concurrently with planned growth and that water quality standards are not jeopardized during growth and construction.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Applicants may also be required to participate in whatever water conservation or fee off-set program the City of Chula Vista has in effect at the time of building permit issuance.				

Comments:

- A. **No impact.** Although the project is east of Interstate 805, it is an industrial project which would not create a demand on or for libraries. See Section XV – Public Services v) Other public facilities.
- B. **No impact.** See Section XV – Public Services ii) Police protection.
- C. **No impact.** See Section XV – Public Service i) Fire protection.
- D. **No impact.** Per the Local Mobility Analysis Chula Vista Nirvana, prepared by Linscott Law & Greenspan Engineers, March 8, 2022 (Appendix O), the project does meet the LOS D or better during the AM and PM peak hours, the threshold per the recent City of Chula Vista Transportation Study Guidelines of determining a project's substantial traffic effect. See Section XVII – Transportation.
- E. **No impact.** Although the project is east of Interstate 805, it is an industrial project which would not create a demand on or for parks and recreation facilities. See Section XV – Public Services iv) Parks and Section XVI – Recreation.

- F. **Less than significant impact.** See Sections X – Hydrology and Water Quality and XIX – Utilities and Service Systems.
- G. **Less than significant impact.** See Section XIX – Utilities and Service Systems.
- H. **Less than significant impact.** See Sections X – Hydrology and Water Quality and XIX – Utilities and Service Systems.

Mitigation: No mitigation measures are required.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
XXII. MANDATORY FINDINGS OF SIGNIFICANCE				
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 project, and the effects of probable future projects.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments:

a) **Less than significant with mitigation.**

Implementation of the project would not substantially degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause fish or wildlife populations to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal with the implementation of **MM BIO-1** through **MM BIO-3**. As described in Section IV – Biological Resources, the project impacts on special-status plants and wildlife with the implementation of **MM BIO-1** through **MM BIO-3** would be **less than significant with mitigation**.

The project will not eliminate important examples of the major periods of California history or prehistory. It will have a **less than significant impact with mitigation** as described in Sections V – Cultural Resources, Section VII – Geology and Soils f) Paleontological, and Section XVIII – Tribal Cultural

Resources. The project would not impact any known historic, archaeological, paleontological, or tribal cultural resources. Nevertheless, it is possible that paleontological resources would be encountered at subsurface levels during ground-disturbing construction activities. To reduce potential adverse effects to post-review discoveries during project implementation, procedures for inadvertent discovery of resources will be implemented through **MM PAL-1**.

- b) **Less than significant with mitigation.** The project cumulatively adds to the impacts of aesthetics, air quality, biological resources, cultural resources, energy, greenhouse gas emission, hazards & hazardous materials, hydrology/water quality, noise, paleontological resources, public services, recreation, transportation, tribal cultural resources, and utilities/service systems. However, the project is consistent with the City's General Plan Vision 2020 land use designation and, therefore, was planned and analyzed under the General Plan EIR. Mitigation would be required to reduce potentially significant impacts related to hazards. As such, cumulatively considerable impacts associated with the project would be **less than significant with mitigation** incorporated (**MM AES-1, MM BIO-1, MM BIO-2, MM BIO-3, and MM PAL-1**). The project does not have impacts that are individually limited but cumulatively considerable.
- c) **Less than significant impact with mitigation.** Direct and indirect environmental effects on human beings were analyzed in the following sections: aesthetics, air quality, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology/water quality, land use and planning, noise, population/housing, public services, recreation, transportation, and utilities/services systems. As found in the discussion of each relevant section, there are no potential impacts that cannot be fully mitigated to less-than-significant levels. Furthermore, the project would comply with all applicable federal, state, and local policies and regulations. The project would not result in environmental effects that would cause substantial adverse effects on human beings, and impacts would be **less than significant with mitigation**. With the implementation of **MM AES-1**, impacts can be mitigated to less than significant.

XXIII. IDENTIFICATION OF ENVIRONMENTAL EFFECTS:

An Initial Study (IS) conducted by the City of Chula Vista determined that the proposed Shinohara Business Center (project) may have potentially significant environmental impacts; however, mitigation measures (MMs) have been incorporated into the project to reduce these impacts to a less-than-significant level. This Mitigated Negative Declaration (MND) has been prepared in accordance with Section 15070 of the California Environmental Quality Act (CEQA) Guidelines.

XXIV. PROJECT REVISIONS OR MITIGATION MEASURES:

No project revisions are proposed, and the mitigation measures are called out in each section above where they are required.

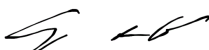
XXV. AGREEMENT TO IMPLEMENT MITIGATION MEASURES

By signing the line(s) provided below, the Applicant(s) and/or Operator(s) stipulate that they have each read, understood, and have their respective company's authority to and do agree to the mitigation measures contained herein and will implement same to the satisfaction of the Environmental Review Coordinator. Failure to sign the line(s) provided below shall indicate the Applicants' and/or Operator's desire that the Project be held in abeyance without approval.

Steven Schwarz
VWP-OP Shinohara Owner, LLC

Printed Name and Title of Authorized Representative

DocuSigned by:



08-16-2022 | 11:36 PDT

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Signature of Authorized Representative

Date

XXVI. 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" as indicated by the checklist on the following pages.

<input checked="" type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Agriculture & Forestry Resources	<input type="checkbox"/>	Air Quality
<input checked="" type="checkbox"/>	Biological Resources	<input type="checkbox"/>	Cultural Resources	<input type="checkbox"/>	Energy
<input checked="" type="checkbox"/>	Geology & Soils	<input type="checkbox"/>	Greenhouse Gas Emissions	<input type="checkbox"/>	Hazards & Hazardous Materials
<input type="checkbox"/>	Hydrology & Water Quality	<input type="checkbox"/>	Land Use & Planning	<input type="checkbox"/>	Mineral Resources
<input type="checkbox"/>	Noise	<input type="checkbox"/>	Population & Housing	<input type="checkbox"/>	Public Services
<input type="checkbox"/>	Recreation	<input type="checkbox"/>	Transportation	<input type="checkbox"/>	Tribal Cultural Resources
<input type="checkbox"/>	Utilities & Service Systems	<input type="checkbox"/>	Wildfire	<input checked="" type="checkbox"/>	Mandatory Findings of Significance

XXVII. DETERMINATION:

On the basis of this initial evaluation:

I find that the project **could not** have a significant effect on the environment, and a **Negative Declaration** will be prepared. ☐

I find that although the 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 or agreed to by the project proponent. A **Mitigated Negative Declaration** will be prepared. ☒

I find that the project **may** have a significant effect on the environment, and an **Environmental Impact Report** is required. ☐

I find that the 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 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 project, nothing further is required. ☐

Oscar Romero

8-17-2022

Oscar Romero
Senior Planner
City of Chula Vista

Date

XXVIII. REFERENCES

- [Brown Field Municipal Airport Land Use Compatibility Plan](#), Airport Land Use Commission San Diego County, Adopted January 25, 2010
- California Department of Fish and Wildlife, [Timberland Conservation Program](#)
- CalFire Fire [Hazard Severity Zone Viewer](#) – Accessed February 6, 2022
- [CalTrans Scenic Highways](#) – Accessed February 5, 2022
- City of Chula Vista [Historic Preservation Program](#) 2011
- [City of Chula Vistas Maps](#) (GIS) CVMapper, Accessed December 12, 2021
- City of Chula Vista [GIS Map of City CIP Projects](#), Accessed on December 14, 2021
- City of Chula Vista [Jurisdictional Runoff Management Program](#), June 2015, updated January 2017, and January 2018
- City of Chula Vista Municipal Code, [Title 14 – Watercourses](#)
- [Chapter 14.20 – Storm Water Management and Discharge Control](#)
- City of Chula Vista Municipal Code, [Title 15 – Buildings and Construction](#)
- [Chapter 15.04 – Excavation, Grading, Clearing, Grubbing and Fills](#)
 - [Chapter 15.26 – Energy Code](#)
 - [Section 15.26.020 – Outdoor Lighting Zones](#)
 - [Outdoor Lighting Zones Map](#)
- City of Chula Vista Municipal Code, [Title 17 – Environmental Quality](#)
- [Chapter 17.28 – Unnecessary Lights](#)
- City of Chula Vista Municipal Code, [Title 19 – Planning and Zoning](#)
- [Section 19.62.120 – Parking Areas – Lighting Arrangements](#)
- City of Chula Vista Municipal Code, [Title 21 – Historic Preservation](#)
- City of Chula Vista [General Plan Vision 2020](#) as amended July 13, 2021
- City of Chula Vista General Plan Vision 2020 [General Plan Update Final Environmental Impact Report](#), December 2005
- Tree Preservation Policy ([Policy Number 576-05](#)) – Accessed December 16, 2021
- City of Chula Vista [Wastewater Master Plan](#), May 2014
- City of Chula Vista [Water Reclamation Facility Feasibility Study](#) – Accessed December 15, 2021
- [Farmland Mapping and Monitoring Program](#) – Accessed February 5, 2022
- [FEMA Flood Map Service Center: Search By Address](#) website, accessed February 7, 2022

San Diego County [Integrated Waste Management Plan 5-Year Review Report 2017](#), approved in January 2018 – Accessed December 15, 2021

San Diego County 2020 [Urban Water Management Plan](#), San Diego County Water Authority, adopted March 2021