|  |
| --- |
| Public Review Draft  21611 Perry Street Self-Storage project  Initial Study/Mitigated Negative Declaration |
| **Prepared for May 2022**  **City of Carson** |
|  |

|  |
| --- |
|  |

|  |  |  |  |
| --- | --- | --- | --- |
| Public Review Draft  21611 Perry Street Self-Storage project  Initial Study/Mitigated Negative Declaration | | | |
| **Prepared for May 2022**  **City of Carson**  **Contact: Stefanie Edmondson, AICP, Senior Planner**  **701 East Carson Street**  **Carson, CA 90745**  **310.952.1761**  **sedmondson@carsonca.gov** | | | |
| 626 Wilshire Boulevard Suite 1100 Los Angeles, CA 90017 213.599.4300 esassoc.com | | |  |
| **Bend**  **Camarillo**  **Delray Beach**  **Destin**  **Irvine**  **Los Angeles** | **Oakland**  **Orlando**  **Pasadena**  **Petaluma**  **Portland**  **Sacramento** | **San Diego**  **San Francisco**  **Santa Monica**  **Sarasota**  **Seattle**  **Tampa** |

|  |  |
| --- | --- |
|  | **OUR COMMITMENT TO SUSTAINABILITY** | ESA helps a variety of public and private sector clients plan and prepare for climate change and emerging regulations that limit GHG emissions. ESA is a registered assessor with the California Climate Action Registry, a Climate Leader, and founding reporter for the Climate Registry. ESA is also a corporate member of the U.S. Green Building Council and the Business Council on Climate Change (BC3). Internally, ESA has adopted a Sustainability Vision and Policy Statement and a plan to reduce waste and energy within our operations. This document was produced using recycled paper. |

Table of Contents

Initial Study/Mitigated Negative Declaration

Page

Chapter 1 Introduction 1

Environmental Factors Potentially Affected 3

Determination 3

Chapter 2 Project Description 5

2.1 Project Overview 5

2.2 Project Location and Existing Setting 5

2.3 Project Site History and Existing Conditions 8

2.4 Project Characteristics 9

2.5 Project Construction 12

2.6 Project Operations 13

2.7 Project Approvals and Discretionary Actions 13

Chapter 3 Environmental Checklist 15

I. Aesthetics 15

II. Agriculture and Forestry Resources 18

III. Air Quality 20

IV. Biological Resources 35

V. Cultural Resources 38

VI. Energy 45

VII. Geology and Soils 51

VIII. Greenhouse Gas Emissions 56

IX. Hazards and Hazardous Materials 62

X. Hydrology and Water Quality 67

XI. Land Use and Planning 72

XII. Mineral Resources 74

XIII. Noise 75

XIV. Population and Housing 94

XV. Public Services 95

XVI. Recreation 98

XVII. Transportation 99

XVIII. Tribal Cultural Resources 102

XIX. Utilities and Service Systems 106

XX. Wildfire 111

XXI. Mandatory Findings of Significance 113

Chapter 4 References 115

Appendices

Appendix A Air Quality Modeling Files

Appendix B Biological Resources Memorandum

Appendix C Cultural Resources Assessment Report (Confidential)

Appendix D Energy Calculations

Appendix E Geotechnical Investigation

Appendix F Paleontological Resources Assessment Report (Confidential)

Appendix G Greenhouse Gas Modeling Files

Appendix H Phase I Environmental Site Assessment

Appendix I Utilities Memorandum

Appendix J Low Impact Development Plan

Appendix K Noise Measurement Calculations

Appendix L Local Transportation Assessment

Appendix M AB 52 and SB 18 Notification

Figures

[Figure 2‑1 Project Site and Regional Location 6](#_Toc101792188)

[Figure 2‑2 Aerial Photograph 7](#_Toc101792189)

[Figure 2‑3 Conceptual Site Plan 10](#_Toc101792190)

[Figure 2‑4 Conceptual Rendering 11](#_Toc101792191)

[Figure 2‑5 Remediation Areas 40](#_Toc101792192)

Tables

[Table 1 Estimated Construction Schedule 26](#_Toc101792193)

[Table 2 Maximum Regional Construction Emissions – Without Mitigation (Pounds per Day) 26](#_Toc101792194)

[Table 3 Maximum Unmitigated Regional Operational Emissions (Pounds per Day) 28](#_Toc101792195)

[Table 4 Maximum Daily Localized Construction Emissions 30](#_Toc101792196)

[Table 5 Maximum Daily Localized Operational Emissions 31](#_Toc101792197)

[Table 6 Summary of Energy Consumption During Project Construction 46](#_Toc101792198)

[Table 7 Project Operational Energy Usage 47](#_Toc101792199)

[Table 8 Annual Project Greenhouse Gas Emissions 59](#_Toc101792200)

[Table 9 General Plan Consistency Analysis 73](#_Toc101792201)

[Table 10 City of Carson Exterior Noise Level Standards 77](#_Toc101792202)

[Table 11 City of Carson Guidelines for Noise Compatible Land Use 79](#_Toc101792203)

[Table 12 Summary of Ambient Noise Measurements 80](#_Toc101792204)

[Table 13 Construction Equipment and Estimated Noise Levels 82](#_Toc101792205)

[Table 14 Construction Noise Levels with Mitigation 85](#_Toc101792206)

[Table 15 Predicted Existing Traffic Noise Levels 86](#_Toc101792207)

[Table 16 Predicted Future Traffic Noise Levels 87](#_Toc101792208)

[Table 17 Estimated Loading Area Noise Levels (Leq) 89](#_Toc101792209)

[Table 18 Estimated Composite Noise Levels from Project Operations 90](#_Toc101792210)

Acronyms and Abbreviations

| **Acronym/Abbreviation** | **Definition** |
| --- | --- |
| ADA | Americans with Disabilities Act |
| ADT | average daily traffic |
| AFY | acre feet per year |
| ANSI | American National Standard Institute |
| APN | Assessor’s Parcel Number |
| AQMP | Air Quality Management Plan |
| AR4 | Fourth Assessment Report |
| ASHRAE | American Society of Heating, Refrigerating and Air-Conditioning Engineers |
| ATCM | Air Toxics Control Measure |
| BACT | Best Available Control Technology |
| BC3 | Business Council on Climate Change |
| BERD | Built Environment Resources Directory |
| BMP | best management practices |
| CAAQS | California Ambient Air Quality Standards |
| CalEEMod | California Emissions Estimator Model |
| CAL FIRE | California Department of Forestry and Fire Protection |
| Cal/OSHA | California Division of Occupational Safety and Health |
| Caltrans | California Department of Transportation |
| CARB | California Air Resources Board |
| CBC | California Building Code |
| CDC | California Department of Conservation |
| CDFW | California Department of Fish and Wildlife |
| CEQA | California Environmental Quality Act |
| CFC | California Fire Code |
| cfs | cubic feet per second |
| CH4 | methane |
| CIWMP | Countywide Integrated Waste Management Plan |
| CNDDB | California Natural Diversity Database |
| CNEL | Community Noise Equivalent Level |
| CNPS | California Native Plant Society |
| CO | carbon monoxide |
| CO2 | carbon dioxide |
| CO2e | CO2 equivalents |
| CPA | Clean Power Alliance |
| dB | decibels |
| dBA | A-weighted decibels |
| DPM | diesel particulate matter |
| DTSC | California Department of Toxic Substances Control |
| EECAP | Energy Efficiency Climate Action Plan |
| EMFAC | CARB on-road vehicle emissions factor |
| EPA | Environmental Protection Agency |
| ESA | Environmental Science Associates |
| ET | evapotranspiration |
| FAR | Floor Area Ratio |
| FTA | Federal Transit Administration |
| GHG | greenhouse gas |
| GPD | gallons per day |
| GWh | gigawatt-hours |
| GWP | global warming potential |
| HAP | hazardous air pollutant |
| HFC | hydrofluorocarbon |
| HHD | heavy-heavy-duty |
| HVAC | heating, ventilation, and air conditioning |
| IPCC | Intergovernmental Panel on Climate Change |
| IS | Initial Study |
| JWPCP | Joint Water Pollution Control Plant |
| LACFD | Los Angeles County Fire Department |
| LACM | History Museum of Los Angeles County |
| LACMC | Los Angeles County Municipal Code |
| LACSD | Los Angeles County Sanitation Districts |
| LARWQCB | Los Angeles Regional Water Quality Control Board |
| LASD | Los Angeles County Sheriff |
| LCFS | Low Carbon Fuel Standard |
| LNAPL | light non-aqueous phase liquid |
| LOS | level of service |
| LST | localized significant threshold |
| LTA | Perry Street Local Transportation Assessment |
| LTA | proposed project’s Local Transportation Assessment |
| MBTA | Federal Migratory Bird Treaty Act |
| MLD | Most Likely Descendent |
| ML-D | Manufacturing Light with a Design Overlay |
| MMT | million metric tons |
| MND | Mitigated Negative Declaration |
| MRZ-2 | Mineral Resource Zone 2 |
| MT | one metric ton |
| MTCO2e | 25 MT of CO2 equivalents |
| MWELO | Model Water Efficient Landscape Ordinances |
| MWh | megawatt-hours |
| N2O | nitrous oxide |
| NAAQS | National Ambient Air Quality Standards |
| NAHC | California Native American Heritage Commission |
| NCCP | Natural Community Conservation Plan |
| NFPA | National Fire Protection Association |
| NOX | nitrogen oxides |
| NPDES | National Pollution Elimination Discharge System |
| NRC | Noise Reduction Coefficient |
| OEHHA | Office of Environmental Health Hazard Assessment |
| OHP | California Office of Historic Preservation |
| PFC | perfluorocarbons |
| PPV | peak particle velocity |
| RCP | Regional Comprehensive Plan |
| RPS | California Renewables Portfolio Standard |
| RWQCB | Regional Water Quality Control Board |
| SB | Senate Bill |
| SCAG | Southern California Association of Governments |
| SCAQMD | South Coast Air Quality Management District |
| SCCIC | South Central Coastal Information Center |
| SCE | Southern California Edison |
| SF6 | sulfur hexafluoride |
| SIP | state implementation plan |
| SLF | Sacred Lands File |
| SLM | Sound Level Meter |
| SMP | Soil Management Plan |
| SO2 | sulfur dioxide |
| SoCalGas | Southern California Gas Company |
| SRA | Source Receptor Area |
| STC | Sound Transmission Class |
| SUSMP | Standard Urban Stormwater Mitigation Plan |
| SWPPP | Stormwater Pollution Prevention Plan |
| SWRCB | State Water Regional Control Board |
| TAC | toxic air contaminants |
| TNM | Traffic Noise Model |
| USFWS | U.S. Fish and Wildlife Service |
| UWMP | Urban Water Management Plan |
| VdB | velocity in decibels |
| VMT | vehicle miles traveled |
| VOC | volatile organic compound |

Page intentionally blank

# Chapter 1

## Introduction

|  |  |
| --- | --- |
| 1. Project Title: | 21611 Perry Street Self-Storage |
| 2. Lead Agency Name and Address: | City of Carson  Community Development Department  701 East Carson Street  Carson, CA 90745 |
| 3. Contact Person and Phone Number: | Stefanie Edmondson, Senior Planner  (310) 952-1761 x1322 |
| 4. Project Location: | 21611 South Perry Street  Carson, CA 90746 |
| 5. Project Sponsor’s Name and Address: | 21611 Perry Street, LLC  4132 Katella Avenue, #205B  Los Alamitos, CA 90720 |
| 6. General Plan Designation(s): | Light Industrial |
| 7. Zoning: | Manufacturing, Light – with Site Plan and Design Review Overlay (ML-D) |

8. Description of Project:

The 21611 Perry Street Self-Storage project (proposed project) is located on a 2.80-acre site at 21611 South Perry Street (project site) in the City of Carson (City). The proposed project includes the development of a self-storage facility with three buildings totaling approximately 113,714 square feet. The self-storage facility would consist of a mix of one- and two-story buildings with a maximum height of 31 feet. The self-storage facility would include a 2,425-square-foot lobby/self-storage office area, a 1,550-square-foot retail use for a cafe, and a 700-square-foot retail use (likely a mail service store such as United Postal Service [UPS] or Federal Express [FedEx]) comprising a total of 4,675 square feet for these uses. The proposed project would provide 41 parking spaces that would be accessed from one driveway providing ingress/egress off South Perry Street. The proposed project would provide approximately 12,134 square feet of landscaping around the perimeter of the project site.

The buildings would house interior climate-controlled storage units and external non-climate-controlled storage units with ramp access to the second floors of the internal buildings. The building’s architecture would incorporate a Spanish style with clay tile roofs and neutral toned stucco. Access to the self-storage facility would be controlled via computerized access gates and would be under digital surveillance 24 hours a day, 7 days a week. The project site is zoned ML-D (Manufacturing, Light – with Site Plan and Design Review Overly) with a General Plan Land Use designation of Light Industrial. The proposed project would require a general plan amendment to allow for a 1:0 Floor Area Ratio (FAR).

9. Surrounding Land Uses and Setting:

The project site is bordered by East Carson Street to the south, South Perry Street to the east, residential uses to the north, and the Dominguez Flood Control Channel (Dominguez Channel) to the west. The project site is in a neighborhood characterized by a mix of residential and commercial uses. An auto repair facility and a truck dealer are located to the east and south across East Carson Street and South Perry Street. Two- and three-story multi-family housing is located directly across South Perry Street to the east with the Perry Mini-Park and single-family homes to the north and northeast of the project site. Additional single-family housing is located southeast of the project site across East Carson Street. The project site is currently vacant and undeveloped.

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

In order for the proposed project to be approved and in compliance with the City’s Municipal Code, the Applicant would be required to obtain the following approvals from the City:

* General Plan Amendment (from Light Industrial to Heavy Industrial)
* Zone Change (from Manufacturing Light with a Design Overlay [ML-D] to Perry Street Specific Plan [PSSP])
* Corresponding General Plan and Zone Text/Map Amendment(s)
* Specific Plan Approval
* Development Agreement
* Site Plan/Design Review Overlay
* CEQA Review
* Lot Merger

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, has consultation begun?

The City notified appropriate tribes regarding Assembly Bill (AB) 52 and Senate Bill (SB) 18 consultation). Refer to Section XVIII, Tribal Cultural Resources, for additional information.

### 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:

☐ Aesthetics ☐ Agriculture and Forestry Resources ☐ Air Quality

☐ Biological Resources ☐ Cultural Resources ☐ Energy

☐ Geology/Soils ☐ Greenhouse Gas Emissions ☐ Hazards & Hazardous Materials

☐ Hydrology/Water Quality ☐ Land Use/Planning ☐ Mineral Resources

☐ Noise ☐ Population/Housing ☐ Public Services

☐ Recreation ☐ Transportation ☐ Tribal Cultural Resources

☐ Utilities/Service Systems ☐ Wildfire ☐ Mandatory Findings of Significance

### Determination

On the basis of this initial study:

|  |  |
| --- | --- |
|  | I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. |
|  | I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared. |
|  | I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. |
|  | I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed. |
|  | I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required. |

Signature Date

Signature Date

Page intentionally blank

# Chapter 2

## Project Description

### 2.1 Project Overview

The proposed project is a self‐storage facility consisting of approximately 113,714 square feet in a mix of one‐ and two‐story buildings, with a maximum height of 31 feet. The 113,714-square-foot self‐storage facility would include a lobby/self-storage office (2,425 square feet), cafe (1,550 square feet), and retail uses (700 square feet) totaling 4,675 square feet.

This Initial Study (IS) serves as the appropriate preliminary environmental documentation in accordance with the California Environmental Quality Act (CEQA) Guidelines to demonstrate the potential environmental impacts associated with the construction and operation of the proposed project. Based on the findings of this IS, the City has determined a Mitigated Negative Declaration (MND) is the appropriate CEQA document for the proposed project.

### 2.2 Project Location and Existing Setting

The project site is located on the northwest corner of East Carson Street and South Perry Street at 21611 South Perry Street in the City of Carson, California, Los Angeles County. The project site is approximately 2.80 acres (approximately 121,968 square feet) and includes Assessor’s Parcel Numbers (APNs) 7327‐010‐014 and 7327‐010‐015. Refer to Figure 2‑1, Project Site and Regional Location. The project site is currently two vacant and undeveloped parcels, as shown in **Figure 2‑2**, *Aerial Photograph*. The project site was previously improved with a large single-story warehouse building that included commercial/industrial uses. These uses were demolished in 2011. There are no habitable structures present on the project site; however, remnant improvements are still present.

The project site is located in a neighborhood characterized by a mix of residential and commercial uses. A truck dealer is located south of the project site across East Carson Street. An auto repair facility and two- and three-story multi-family residential units are located directly across South Perry Street to the east with the Perry Street Mini-Park and single-family homes located to the north and northeast of the project site. Single-family residential units are located southeast of the project site across East Carson Street. The Dominguez Channel, a 15.7-mile-long drainage channel that runs north-south through the City of Carson, is located to the west of the project site and a flood control easement separates the Dominguez Channel from the project site. The project site is zoned ML-D (Manufacturing, Light – with Site Plan and Design Review Overly) with a General Plan Land Use designation of Light Industrial. The proposed project would require a general plan amendment to allow for a 1:0 FAR.

Figure 2‑1 Project Site and Regional Location

Figure 2‑2 Aerial Photograph

### 2.3 Project Site History and Existing Conditions

According to the Phase I Environmental Site Assessment (Phase I ESA), prepared for the project site, there are known groundwater impacts at the project site. In addition, in January 2011, light non-aqueous phase liquid (LNAPL) began appearing within the Dominguez Channel (west of the project site). The LNAPL was reportedly observed entering into channel waters from sediments within the bottom of the channel and within horizontal, perforated sub-drain pipe systems installed within both the west and east channel levees. In April 2011, the Los Angeles Regional Water Quality Control Board (LARWQCB) reportedly issued orders pursuant to Section 13267 of the California Water Code requiring potential responsible parties to assess contaminants of concern impacting soil, soil vapor, and groundwater at the Dominguez Channel and determine the extent that the nearby facilities may have contributed to the release. Upon completion of the required assessments, the LARWQCB determined that the project site (i.e., Carson Air Harbor property), was not a likely contributor to the LANPL release and was granted no further action status relative to the Dominguez Channel issues. However, a separate case for the project site was opened by the LARWQCB (Site Cleanup Program Case No. 0490C) due to other possible sources of contamination. There are 16 groundwater monitoring wells present at the project site that are used as part of the groundwater monitoring program. Primary groundwater contaminants of concern identified in these wells included total petroleum hydrocarbons in the gasoline range, benzene and diisopropyl ether. It was noted that concentrations in existing monitoring wells generally appeared to be stable or decreasing, with a few instances of fluctuation.

To address project site impacts to soil in order to redevelop the project site for commercial/industrial use, a Soil Excavation Workplan was developed by URS and subsequently approved by the LARWQCB on April 21, 2014. Between September 9 and October 8, 2014, 7,255.69 tons (approximately 4,837 in-place cubic yards assuming 1.5 tons per cubic yard) of impacted soil were excavated from the project site and disposed off-site. The impacted soil was removed from four distinct areas to depths ranging from approximately 5 to 8 feet (see Figure 2‑5 in Section V, *Cultural Resources*). The excavated areas were then backfilled with imported clean fill or with an approximate 50:50 mix of crushed concrete and imported fill and a small amount of clean overburden soil.

URS concluded that based on confirmation soil sampling for each of the excavations, the cleanup criteria set out in the workplan had been met. URS also stated that a Soil Management Plan (SMP) for the project site was prepared to mitigate potential future exposure to residual petroleum hydrocarbons and odor generation during project site development. URS also stated that a deed restriction limiting project site use to commercial/industrial uses would be required. It was also noted in the report that a vapor barrier would be incorporated in the design of any future structures that are constructed at the project site. URS requested that the LARWQCB issue a no further action letter for vadose zone soils at the project site. The LARWQCB reviewed the report and concurred with its findings. A no further action letter for soil was issued by the LARWQCB on December 14, 2015.

### 2.4 Project Characteristics

The proposed project is a self‐storage facility consisting of approximately 113,714 square feet in a mix of three one‐ and two‐story buildings, with a maximum height of 31 feet. Building A would total 24,808 square feet and would include a lobby/self-storage office and retail uses totaling 4,675 square feet. Specifically, the proposed project would include a 2,425-square-foot space for the lobby/self-storage office area, a 1,550-square-foot space for a cafe use, and a 700-square-foot space for a retail use (likely a mail service store occupied by operators such as UPS or FedEx). Building B would total 30,969 square feet and Building C would total 57,937 square feet. Buildings would house interior climate‐controlled units and external non‐climate self-storage rental units with ramp access to the second floors of the internal buildings. Ramp access to the second floors would be provided between Buildings B and C. Figure 2‑3, Conceptual Site Plan, provides an illustration of the proposed project. Storage units would range in size from a 5-foot by 10-foot unit as the smallest unit for rent to a 10-foot by 38-foot unit as the largest unit for rent. Fire suppression within the proposed buildings would consist of a National Fire Protection Association (NFPA)-13 sprinkler system as well as surrounding fire hydrants. Construction type is to be Type-II non-combustible.

The proposed project would include approximately 12,134 square feet of landscaping, mostly occurring around the perimeter of the project site. Significant landscaping and plantings would be provided along the project site’s northern edge to shield and provide a privacy screen for the residential neighbors. A variety of drought tolerant ornamental shrubs and medium size trees, which would be varying in height, would be included as a part of the proposed landscaping.

Landscape areas would be designed to receive stormwater runoff from the site and mitigate urban heat island effect through vegetated planting areas and tree canopies. The irrigation system would be a fully automatic underground drip system. Backflow prevention devices would be installed to meet all local and City applicable codes. The irrigation system would be designed and constructed to meet and/or exceed Model Water Efficient Landscape Ordinances (MWELO). Water conservation products (High efficiency / low precipitation) and an evapotranspiration (ET) weather-based control system would be incorporated into the irrigation system design.

As shown in **Figure 2‑4**, *Conceptual Rendering*, the proposed project would consist of neutral-toned building materials in Spanish styled architecture, which include Spanish accents, Spanish tile roof, spandrel glazing, and landscaping. The proposed design would largely resemble a multi‐family residential building in its aesthetics and massing.

As shown in Figure 2-3, the proposed project would include one main entrance to the project site on South Perry Street, which would allow self-storage customers, employees, and mail/delivery trucks such as those used by UPS or FedEx to enter and exit the project site. Specifically, to accommodate the entry to the new storage facility, the existing driveway would be demolished, and a new driveway would be constructed and located near the center of the eastern frontage along South Perry Street. Curb, gutter, sidewalks, and driveway would be designed and constructed with City Engineer review and approval.

Figure 2‑3 Conceptual Site Plan

Figure 2‑4 Conceptual Rendering

The proposed project would provide 22 public parking spaces outside the gates with an additional 19 spaces provided inside the gates for a total of 41 parking spaces. Of the total parking stalls, two stalls would be included as Americans with Disabilities Act (ADA)-accessible stalls, and seven stalls would be identified to accommodate clean air and/or vanpool EV vehicles.

New lighting would include building identification wayfinding and security lighting. Low emittance lighting would be provided on the walls of the buildings facing the internal drive aisles and mounted at a height of 12 to 13 feet. Pedestrian areas including entryways into the proposed project would be well-lit for security using ground-mounted fixtures. Light fixtures would be shielded and directed towards the areas to be lit and away from light-sensitive residential land uses located to the north and east of the project site. Various features included in the lighting fixtures would also help reduce light trespass including: target zone illumination, photo control occupancy sensing, zero up-light emissions, and best-in-class surge protection.

Proposed signage would include building identification signage, street address, and identification/wayfinding signage for the vehicular and pedestrian entries to the buildings. Signage would comply with City requirements and would not exceed two square feet for every 20 feet of business storefront and 1 square foot for each linear foot that exceeds the first 20 feet. The larger identifying signs would be approximately 26 feet 7.5 inches long and 2 feet 6 inches tall and provided in multiple high-visibility locations along the structure.

The self-storage facility would feature a contemporary 24-hour security system including keypad entry security gates, individually monitored and alarmed storage units, video surveillance monitoring, burglar alarms, as well as an intercom system. The manger and/or other office personnel would monitor these security systems on a control panel during hours of operation. Should there be a violation of any of the security systems when the management office is closed, an independent security firm would respond.

### 2.5 Project Construction

Project construction is anticipated to start in January 2023, commencing with removal of the existing driveways, followed by approximately 1 month of site preparation. Construction would be completed in 8 phases over an estimated 13-month period and would include the following construction activities: site preparation, grading and excavation, trenching, concrete pouring for the foundation, building construction, paving, architectural coatings and landscaping. Project construction would include the removal of the existing driveways, the excavation of approximately 906 cubic yards of soil and import approximately 257 cubic yards of soil. In addition, the upper 6 feet of existing earth materials within the proposed building footprint areas would be excavated and properly compacted for foundation and slab support.

The proposed project would generate off-site traffic during the initial delivery of construction vehicles and equipment to the project site, the daily arrival, and departure of construction workers, the delivery of materials throughout the construction period, the removal of soil and construction debris and the import of soil. Deliveries would generally include shipments of concrete, lumber, other building materials for on-site structures, utilities (e.g., plumbing equipment and electrical supplies), and paving and landscaping materials.

### 2.6 Project Operations

During project operation, the proposed project would include 5 to 6 employees comprising two storage managers, two cafe employees, and one or two employees for the mail service store. Gate access would be provided from 6:00 a.m. to 10:00 p.m., 7 days a week. Management employees would be on-site during regular business hours, which are presumed to be 8 a.m. to 6 p.m., Monday through Sunday. Typical daily operational traffic would be low in frequency and significantly less than other commercial uses, a traditional warehouse, storage, or other manufacturing use. Operational traffic would consist of inbound and outbound delivery trucks and self-storage patrons arriving and departing the project site. Most traffic trips to the project site for the proposed project would occur at hours outside of the peak morning and afternoon commute periods.

### 2.7 Project Approvals and Discretionary Actions

The proposed project would require the discretionary approvals from the City of Carson City Council, with initial recommendations by the City of Carson Planning Commission. In consideration of the forthcoming General Plan Update, the Applicant will work closely with Planning staff to determine the ideal zoning and land use designations and standards of review. In order for the proposed project to be approved and in compliance with the City’s Municipal Code, the Applicant would be required to obtain the following approvals from the City:

* General Plan Amendment (from Light Industrial to Heavy Industrial)
* Zone Change (from Manufacturing Light with a Design Overlay [ML-D] to Perry Street Specific Plan [PSSP])
* Corresponding General Plan and Zone Text/Map Amendment(s)
* Specific Plan Approval
* Development Agreement
* Site Plan / Design Review Overlay
* CEQA Review
* Lot Merger

Page intentionally blank

## 

# Chapter 3

## Environmental Checklist

#### I. Aesthetics

| ***Issues (and Supporting Information Sources)*** | ***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, would the project: |  |  |  |  |
| a) Have a substantial adverse effect on a scenic vista? |  |  |  |  |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway? |  |  |  |  |
| 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? |  |  |  |  |
| d) Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area? |  |  |  |  |

##### Discussion

a) The project site is located on two parcels which are currently vacant and undeveloped. According to the City of Carson General Plan EIR, there are no officially designated scenic vistas within Carson (City of Carson 2002). In addition, the project site is within an established a neighborhood characterized by a mix of residential and commercial uses. While the proposed project would develop a currently vacant site, the proposed project would develop similar uses to those in the surrounding area. Therefore, no impacts to a scenic vista would occur.

b) According to the California Department of Transportation (Caltrans), there are no Officially Designated State or County Scenic Highways as defined by Caltrans, the County of Los Angeles, or any other local governing body adjacent to or within the vicinity of the project site (Caltrans 2021). Furthermore, according to the City of Carson General Plan EIR, there are no officially designated scenic vistas or scenic highways within Carson (City of Carson 2002). Therefore, no impact to scenic resources within a State scenic highway would occur.

c) The project site is considered to be located in an urbanized area. The project site is surrounded by urbanized uses. The project site is located in a neighborhood characterized by a mix of residential and commercial uses. A truck dealer is located on south of the project site across East Carson Street. An auto repair facility and two- and three-story multi-family residential units are located directly across South Perry Street to the east with the Perry Mini-Park and single-family homes located to the north and northeast of the project site. Additional single-family residential units are located southeast of the project site across East Carson Street. The Dominguez Channel, a 15.7-mile-long drainage channel that runs north-south through the City of Carson, is located to the west of the project site and a flood control easement separates the Dominguez Channel from the project site. Given the proposed project’s location in an urbanized area, project implementation may result in a significant impact if the proposed project would conflict with applicable zoning and other regulations governing scenic quality.

The project site is designated as Light Industrial land use and zoned as ML-D (Manufacturing, Light – with Site Plan and Design Review Overlay). The proposed project would require a zone change and adoption of a specific plan to allow implementation of the proposed self-storage facility. Approval of the proposed project would require Site Plan and Design review to ensure that the proposed project does not conflict with applicable zoning and other regulations governing scenic quality. The proposed project would be required to comply with City’s Industrial Zone Site Development Standards (City of Carson Municipal Code [CMC] Section 9146), which contains building requirements for structures, frontages, and landscaping. As a result, the proposed project would be consistent with the CMC.

The City of Carson’s General Plan Land Use Element contains policies and regulations governing scenic quality and visual aesthetics for the City. However, there are no aesthetic related regulations regarding industrial development within the General Plan. The proposed project would be designed to be compatible with zoning and design regulations as detailed in the specific plan and would adhere to all height, frontage, and zoning requirements that may be required to maintain aesthetic compatibility.

As discussed above, the proposed project would consist of neutral-toned building materials in Spanish styled architecture, which include Spanish accents, Spanish tile roof, spandrel glazing, and landscaping. The proposed design would largely resemble a multi‐family residential building in its aesthetics and massing. The proposed project would include approximately 12,134 square feet of landscaping around the perimeter of the project site. The proposed design of the self-storage facility and landscaping would provide visual continuity within the area.

Therefore, based on the above, the proposed project would not conflict with zoning or regulations governing scenic quality and impacts would be less than significant.

d) The project site is located within an urbanized area where typical sources from glare are caused by the reflection of sunlight or artificial light by highly polished surfaces such as window glass or reflective materials. In addition, existing residential and commercial uses surrounding the project site typically include nighttime security and wayfinding lighting such that typically emanate from building interiors, passes through windows, and light from outdoor sources, such as street lighting, parking lot lighting, building illumination, and vehicles. Light-sensitive residential uses are located directly across South Perry Street to the east and to the north and northeast of the project site. Additional light sensitive residential uses are located southeast of the project site across East Carson Street. Implementation of the proposed project would introduce new sources of nighttime lighting onto the project site as a result of installation of new exterior light fixtures that are generally required for security, wayfinding, and aesthetic purposes. Specifically, low emittance lighting would be provided on the walls of the buildings facing the internal drive aisles and mounted at a height of 12 to 13 feet. Pedestrian areas including entryways into the proposed project would be well-lit for security using ground-mounted fixtures. Pursuant to CMC Section 9127.1, all exterior lighting installed on the project site must be directed away from all adjoining and nearby residential property and arranged and controlled so it would not create a nuisance or hazard to traffic or to the living environment. As such, all exterior lighting would be shielded and/or recessed to reduce light trespass (i.e., excessive or unwanted light generated on one property illuminating another property). Therefore, based on compliance with local requirements, impacts associated with light and nighttime glare would be less than significant.

#### II. Agriculture and Forestry Resources

| ***Issues (and Supporting Information Sources)*** | ***Potentially Significant Impact*** | ***Less than Significant with Mitigation Incorporated*** | ***Less-than- Significant Impact*** | ***No Impact*** |
| --- | --- | --- | --- | --- |
| II. AGRICULTURE AND FORESTRY 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 Department 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? |  |  |  |  |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? |  |  |  |  |
| 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))? |  |  |  |  |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? |  |  |  |  |
| e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? |  |  |  |  |

##### Discussion

1. The project site is located within the City of Carson on two parcels that are currently vacant and undeveloped. The project site is not zoned for agricultural uses and no agricultural uses or related operations are present on the project site or in the surrounding urbanized area. The project site is not located on designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program (CDC 2021). Therefore, no impact would occur from conversion of Farmland to non-agricultural uses.

b) The project site is located in an urbanized area designated as Light Industrial in the City of Carson’s General Plan Land Use Map with a corresponding zoning of ML-D (Manufacturing, Light – with Site Plan and Design Overlay) (City of Carson 2004). No agricultural zoning is present in the project vicinity, and no nearby lands are enrolled under the Williamson Act (CDC 2016). The California Department of Conservation, Division of Conservation, Division of Land Resource Protection does not identify the project site as being protected by the Williamson Act (CDC 2017). As such, the proposed project would not conflict with existing zoning for agricultural uses, or a Williamson Act contract and no impact would occur.

c) As discussed previously, the project site is designated as Light Industrial on the City of Carson’s General Land Plan Land Use Map and is zoned ML-D (Manufacturing, Light – with Site Plan and Design Review Overlay) (City of Carson 2004). The project site includes two parcels that are currently vacant and undeveloped within an urbanized area. No forestland or timberland uses are located in the project site’s urban setting or vicinity. Therefore, no impact would occur to zoning for forestland or timberland.

d) As discussed above, the project site is zoned for industrial uses and the surrounding areas are zoned for residential and commercial uses. No forestland or timberland uses are located at the project site or within the vicinity. Therefore, no impact would occur to forestland or timberland.

e) As discussed above, the proposed project would not involve changes to the existing environment that could result in the conversion of farmland or forestland and there are no farmland uses on or in the vicinity of the project site. Therefore, no impact would occur from a conversion of farmland to a non-agricultural use.

#### III. Air Quality

| ***Issues (and Supporting Information Sources)*** | ***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? |  |  |  |  |
| 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? |  |  |  |  |
| c) Expose sensitive receptors to substantial pollutant concentrations? |  |  |  |  |
| d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people? |  |  |  |  |

##### Discussion

a) Regulatory Background

The proposed project is located within the 6,745-square-mile South Coast Air Basin (Basin). Air quality planning for the Basin is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). SCAQMD is the agency principally responsible for comprehensive air pollution control in the Basin. The Basin is subject to the SCAQMD’s Air Quality Management Plan (AQMP), which was created to meet the to meet the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS) for criteria air pollutants. The AQMP contains a comprehensive list of pollution control strategies directed at reducing emissions from stationary sources and on-road and off-road mobile sources and achieving ambient air quality standards. These strategies are developed, in part, based on regional population, housing, and employment projections prepared by the Southern California Association of Governments (SCAG). As part of its air quality planning, SCAG has prepared the Regional Comprehensive Plan (RCP) and Guide and the Regional Transportation Program/Sustainable Communities Strategy (RTP/SCS), these plans provide the basis for the land use and transportation components of the AQMP and are used in the preparation of the air quality forecasts and the consistency analysis included in the AQMP.[[1]](#footnote-2) Both the RCP and AQMP are based, in part, on projections originating with County of Los Angeles and City of Carson general plans. The proposed project would be subject to the SCAQMD’s AQMP.

The SCAQMD’s 2016 AQMP was prepared to accommodate growth, reduce the high levels of pollutants within the areas under the jurisdiction of SCAQMD, return clean air to the region, and minimize the impact on the economy (SCAQMD 2016). The SCAQMD is required, pursuant to the Clean Air Act, to reduce emissions of criteria pollutants for which the Basin is in non-attainment for the NAAQS (e.g., ozone [O3], and particulate matter 2.5 microns in diameter or less [PM2.5]). Projects that are consistent with the assumptions used in the AQMP do not interfere with attainment because the associated growth with the projects are included in the projections utilized in the formulation of the AQMP. Projects that are consistent with the projections of employment and population forecasts identified in the RTP/SCS are considered consistent with the AQMP growth projections, since the RTP/SCS forms the basis of the land use and transportation control portions of the AQMP. The SCAQMD’s 2016 AQMP contains a comprehensive list of pollution control strategies directed at reducing emissions and achieving the NAAQS and includes transportation control strategies designed to reduce vehicle miles traveled (VMT). SCAQMD’s 2016 AQMP control strategies were developed, in part, based on regional growth projections prepared by SCAG through 2040. When determining consistency with AQMP growth assumptions, the projections in the AQMP for achieving air quality goals are based on assumptions in SCAG’s 2016-2040 RTP/SCS regarding population, housing, and growth trends. Determining whether or not a project exceeds the assumptions reflected in the AQMP involves the evaluation of consistency with applicable population, housing, and employment growth projections and appropriate incorporation of AQMP control measures. While SCAG’s Regional Council adopted the 2020–2045 RTP/SCS on September 3, 2020, SCAQMD’s 2016 AQMP is based on growth projections and control strategies from the 2016–2040 RTP/SCS. The SCAQMD is currently working on a 2022 AQMP, which will base its analyses on the 2020–2045 RTP/SCS. However, until the 2022 AQMP is adopted, consistency with the 2016–2040 SCAG RTP/SCS is appropriate when discussing a project’s consistency with the SCAQMD’s 2016 AQMP.

The proposed project’s consistency with applicable air quality plans is provided below. There are no applicable numerical thresholds of significance for this consistency analysis. In accordance with the SCAQMD’s CEQA Air Quality Handbook, the following criteria were used to evaluate the proposed project’s consistency with the SCAQMD’s 2016 AQMP:

* Criterion 1: Will the project result in any of the following:
  + An increase in the frequency or severity of existing air quality violations; or
  + Cause or contribute to new air quality violations; or
  + Delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.
* Criterion 2: Will the project exceed the assumptions utilized in preparing the AQMP?

The proposed project’s potential impacts with respect to these criteria are discussed to assess the consistency with the SCAQMD’s 2016 AQMP.

###### Criterion 1

Consistent with the first criterion, the proposed project would not conflict with the ability of federal, State, and local agencies to implement fair-share emissions strategies or achieve compliance with criteria pollutant standards or other federal requirements. Specifically, the proposed project’s volatile organic compound (VOC), nitrogen oxides (NOX), carbon monoxide (CO), sulfur dioxide (SO2), respirable particulate matter (10 microns or smaller in diameter, PM10), and fine particulate matter (2.5 microns or smaller in diameter, PM2.5) emissions resulting from construction and operation were analyzed to ascertain any potential effects on regional and localized concentrations and determine the potential for such emissions to cause or contribute to a violation of the ambient air quality standards. As discussed under response to Section III (b) and response to Section III (c), the proposed project’s construction and operational emissions would not exceed the SCAQMD’s regional mass emissions thresholds for VOC, NOX, CO, SO2, PM10 or PM2.5 or the localized significance thresholds (LSTs) for NOX, CO, PM10 or PM2.5, or generate roadway traffic congestion at an intersection that would result in a CO hotspot in excess of the ambient air quality standards as a result of project motor vehicle operations. The proposed project’s emissions would therefore not increase concentrations of criteria pollutants or their precursors in a manner that would conflict with or obstruct SCAQMD’s efforts to achieve attainment of ambient air quality standards for any criteria pollutant for which it is currently not in attainment or jeopardize the current attainment status of the Basin for other criteria pollutants. Therefore, in response to Criterion 1, the proposed project would not result in an increase in the frequency or severity of existing air quality violations, cause or contribute to new air quality violations, or delay timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

###### Criterion 2

With respect to the second criterion for determining consistency with AQMP growth assumptions, the projections in the AQMP for achieving air quality goals are based on assumptions in SCAG’s 2016–2040 RTP/SCS regarding population, housing, and growth trends. Determining whether or not a project exceeds the assumptions reflected in the AQMP involves the evaluation of consistency with applicable population, housing, and employment growth projections and appropriate incorporation of AQMP control measures. The following discussion provides an analysis with respect to these criteria.

Air Quality Management Plan Consistency

The proposed project would not obstruct implementation of the 2016 AQMP for, as discussed below, its construction and operational emissions would be less than significant. The proposed project would comply with applicable required fleet rules and control strategies to reduce on-road truck emissions (i.e., 13 California Code of Regulations, Section 2025 [CARB Truck and Bus regulation]), and other applicable SCAQMD rules specified and incorporated in the 2016 AQMP. As discussed above, projects, uses, and activities that are consistent with the applicable growth projections and control strategies used in the development of the AQMP would not jeopardize attainment of the air quality levels identified in the AQMP. As discussed below, compliance with the applicable required fleet rules and control strategies and requirements would render it consistent with, and meet or exceed, the AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities. Thus, the proposed project’s criteria pollutant emissions would not cause the Basin’s criteria pollutant emissions to worsen so as to impede the SCAQMD’s efforts to achieve attainment with respect to any criteria pollutant for which it is currently not in attainment of the NAAQS and CAAQS (e.g., ozone, PM10, and PM2.5),[[2]](#footnote-3) or to cause the Basin to deteriorate from its current attainment status with respect to any other criteria pollutant emissions.

As further discussed below, the proposed project is also consistent with the 2016 AQMP. The proposed project incorporates into its design appropriate control strategies set forth in the 2016 AQMP for achieving its emission reduction goals and would be consistent with the demographic and economic assumptions upon which the plan is based.

Construction

Control Strategies

During its construction phase, the proposed project would ensure compliance with CARB’s requirements to minimize short-term emissions from on-road and off-road diesel equipment, and with SCAQMD’s regulations such as SCAQMD Rule 403 for controlling fugitive dust and SCAQMD Rule 1113 for controlling VOC emissions from architectural coatings. Compliance with these regulatory measures and requirements would be consistent with and meet or exceed the AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities.

Growth Projections

The proposed project would generate short-term construction jobs, but these jobs would not necessarily bring new construction workers or their families into the region, since construction workers are typically drawn from an existing regional pool who travel among construction sites within the region. Construction workers are not typically brought from other regions to work on developments such as the proposed project. Moreover, these jobs would be relatively small in number and temporary in nature. Therefore, the proposed project’s construction jobs would not conflict with the long-term employment or population projections upon which the 2016 AQMP is based.

Operations

Control Strategies and Policy Consistency

The 2016 AQMP was prepared to accommodate growth, reduce the levels of pollutants within the areas under the jurisdiction of SCAQMD, return clean air to the region, and minimize the impact on the economy. Projects that are considered consistent with the AQMP would not interfere with attainment because this growth is included in the projections used in the formulation of the AQMP. As mentioned above, for determining consistency with AQMP growth assumptions, the projections in the AQMP for achieving air quality goals are based on assumptions in SCAG’s 2016-2040 RTP/SCS regarding population, housing, and employment growth trends.

The project site is zoned Manufacturing, Light – with Site Plan and Design Review Overlay with a General Plan land use designation of Light Industrial. The proposed project includes three two-story self-storage buildings with a total of approximately 113,714 square feet. The proposed project includes a 2,425-square-foot lobby/office area, 1,550 square feet to be used as a cafe area, and a 700-square-foot space for a mail service store (i.e., UPS or FedEx). The buildings would house interior climate‐controlled units and external non‐climate units with ramp access to the second floors of the internal buildings. The project site is in a neighborhood characterized by a mix of residential and commercial uses with single-family residences located to the north of the project site. An auto repair facility and a truck dealer are located on the east and south across East Carson Street and South Perry Street. The Perry Mini-Park and single-family homes are located to the northeast of the project site. Additional single-family housing is located southeast of the project site across East Carson Street.

Growth Projections

The proposed project would generate approximately five or six new employees, including two self-storage managers, two cafe employees, and one or two employees for the mail service store. These new employees are well within SCAG’s employment growth assumptions for Carson. SCAG predicted Carson’s employment growth between 2012 and 2040 to be 11,200 jobs (SCAG 2016). During each operation day, the proposed project has a maximum of 580 daily vehicle trips, which would include up to 93 AM peak hour trips, and 45 PM peak hour trips from employees and visitors to and from the project site (Fehr & Peers 2022). As discussed in Section XVII, Transportation, this proposed project does not have a significant impact on transportation. Mobile source emissions associated with the project site were calculated and are discussed in Threshold b, below.

Projects, uses, and activities that are consistent with the applicable growth projections and control strategies used in the development of the AQMP would not jeopardize attainment of the air quality reductions identified in the AQMP. Based on the above, the proposed project would not conflict with growth projections in the 2016 AQMP and impacts would be less than significant.

b) As indicated above, the project site is in the South Coast Air Basin. State and federal air quality standards are exceeded in many parts of the Basin for ozone (O3) and PM2.5, including those monitoring stations nearest to the project area, and the Basin is designated a State and federal non-attainment area for these pollutants. The Basin is also designated as a State non-attainment area for PM10. The proposed project would contribute to local and regional air pollutant emissions during construction (short-term or temporary) and operation. However, based on the following analysis, construction and operation of the proposed project would result in less-than-significant impacts relative to the daily significance thresholds for criteria air pollutant emissions established by the SCAQMD for construction and operational phases.

Daily regional construction and operational source project ozone precursor and criteria pollutant emissions such as VOC, NOX, CO, SO2, PM10, and PM2.5 were estimated using the California Emissions Estimator Model (CalEEMod) (Version 2020.4.0) software, an emissions inventory software program recommended by SCAQMD. CalEEMod is based on outputs from the CARB OFFROAD model and the CARB on-road vehicle emissions factor (EMFAC) model, which are emissions estimation models developed by CARB and used to calculate emissions from construction activities, heavy-duty off-road equipment, and on-road vehicles. Emissions from on-road vehicles were estimated outside of CalEEMod using EMFAC2021 emission factors for haul and material vendor trucks and worker vehicles, since the most current version of CalEEMod uses EMFAC2017. Activities parameters, such as number of pieces of equipment and equipment usage hours were provided by the Applicant.

###### Construction

Construction activities associated with the proposed project would generate temporary and short-term emissions of VOC, NOX, CO, SO2, PM10, and PM2.5. Construction related emissions are expected from site preparation, grading, trenching, foundations, paving, building construction, and architectural coating activities. During the site preparation approximately 150 cubic yards (cy) of concrete/asphalt debris would be generated. During the grading phase approximately 906 cy of soil would be generated with approximately 257 cy being imported as fill. Project construction is expected to commence in January 2023 and would last through February 2024. If project construction commences later than the anticipated start date, air quality impacts would be less than those analyzed herein, because a more energy-efficient and cleaner burning construction equipment fleet mix would be expected in the future, pursuant to State regulations that require construction equipment fleet operators to phase-in less polluting heavy-duty equipment. Therefore, air quality impacts would generally be less than those analyzed herein due to the likelihood of less emissions generated in a day.

The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per CEQA guidelines. Site specific construction fleet may vary due to specific project needs at the time of construction. The duration of construction activity and associated construction equipment was estimated based on consultation with the Applicant. A detailed summary of construction equipment assumptions by phase is provided in the modeling files in **Appendix A** of this IS/MND.

Construction of the proposed project is estimated to last approximately 13 months. Construction duration by phase is provided in Table 1, Estimated Construction Schedule.

The maximum daily regional emissions from these activities are estimated by construction phase and compared to the SCAQMD significance thresholds. Maximum daily emissions are calculated by taking the sum of the overlapping phases for each criteria pollutant. As shown in Table 2, Maximum Regional Construction Emissions – Without Mitigation (Pounds per Day), emissions resulting from project construction would not exceed any criteria pollutant thresholds established by the SCAQMD (SCAQMD 2015). Therefore, impacts would be considered less than significant, and no mitigation is required.

|  |  |  |  |
| --- | --- | --- | --- |
| Table 1  Estimated Construction Schedule | | | |
| Activity | Start Date | End Date | Duration (Work Days) |
| Site Preparation | 01/2023 | 02/2023 | 23 |
| Grading/Excavation | 02/2023 | 03/2023 | 21 |
| Drainage/Utilities/Trenching | 03/2023 | 05/2023 | 44 |
| Foundations/Concrete Pour | 05/2023 | 06/2023 | 24 |
| Building Construction | 06/2023 | 02/2024 | 176 |
| Paving | 01/2024 | 01/2024 | 23 |
| Architectural Coatings | 11/2023 | 02/2024 | 67 |
| Landscaping | 11/2023 | 02/2024 | 67 |
| SOURCE: City of Carson 2021, in consultation with the Applicant | | | |

| Table 2  Maximum Regional Construction Emissions – Without Mitigation (Pounds per Day) | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| Year | Emissions (pounds per day) | | | | | |
| VOC | NOX | CO | SOX | PM10 | PM2.5 |
| Construction Phases | | | | | | |
| Demolition & Site Preparation – 2023 | 2 | 18 | 24 | <1 | 1 | 1 |
| Grading/Excavation – 2023 | 5 | 60 | 47 | <1 | 5 | 2 |
| Drainage/Utilities/Trenching – 2023 | 2 | 20 | 29 | <1 | 1 | 1 |
| Foundations/Concrete Pour – 2023 | 2 | 18 | 25 | <1 | 1 | 1 |
| Building Construction – 2023 | 3 | 29 | 42 | <1 | 2 | 1 |
| Building Construction – 2024 | 3 | 27 | 41 | <1 | 2 | 1 |
| Architectural Coating – 2023 | 16 | 3 | 5 | <1 | <1 | <1 |
| Architectural Coating – 2024 | 16 | 3 | 5 | <1 | <1 | <1 |
| Landscaping – 2023 | <1 | 1 | 3 | <1 | <1 | <1 |
| Landscaping – 2024 | <1 | 1 | 2 | <1 | <1 | <1 |
| Paving – 2024 | 2 | 21 | 29 | <1 | 1 | 1 |
| Overlapping Phases | | | | | | |
| Building Construction – 2023 + Architectural Coatings – 2023 + Landscaping – 2023 | 20 | 33 | 49 | <1 | 2 | 2 |
| Building Construction – 2024 + Paving – 2024 + Architectural Coating 2024 + Landscaping – 2024 | 21 | 52 | 77 | <1 | 3 | 2 |
| Building Construction – 2024 + Architectural Coating 2024 + Landscaping – 2024 | 19 | 31 | 48 | <1 | 2 | 1 |
| Maximum Daily Regional Emissions | 21 | 60 | 77 | ***<1*** | 5 | 2 |
| SCAQMD Regional Threshold | 75 | 100 | 550 | 150 | 150 | 55 |
| Threshold Exceeded? | No | No | No | No | No | No |
| NOTE:  Totals may not add up exactly due to rounding in the modeling calculations. Refer to **Appendix A** of this IS/MND for details.  SOURCE: ESA 2022 | | | | | | |

###### Operation

The proposed project is a self-storage facility with ancillary office and retail uses. The proposed project would include a surface parking lot with 41 parking spaces. During operation of the proposed project, the primary emission sources would consist of mobile sources, including visitors loading and unloading to the storage units, visitors traveling to and from the retail uses, and employees driving to and from the project site. Energy usage would come in the form of electricity and natural gas for building heating, ventilation, and air conditioning (HVAC) systems, lighting, cooking in the cafe, and area sources such as landscaping equipment and the use of consumer products for routine cleaning and maintenance. The proposed project can expect most of the energy usage to come from lighting and the HVAC system required to provide air conditioning of the building.

Operational emissions for the proposed project were estimated using CalEEMod for the land uses that would be developed under the proposed project (2024 project buildout) (refer to **Appendix A** of this IS/MND for compiled detailed assumptions, calculations, and modeling outputs). Mobile source emissions are based on the vehicle emission factors from EMFAC2021 and the default trip length values for the project land uses in CalEEMod, which are Air District-wide average trip distance values. Daily trip generation from the proposed project’s Local Transportation Assessment (LTA), provided in **Appendix L** of this IS/MND, were used to estimate the total VMT for the project trips (Fehr & Peers 2022).

The proposed project would also include landscaping equipment such as lawnmower and trimmers to maintain the approximately 12,134 square feet of landscaping proposed around the perimeter of the project site. The CalEEMod tool uses landscaping equipment greenhouse gas (GHG) emission factors from the CARB OFFROAD model and the CARB Technical Memo: Change in Population and Activity Factors for Lawn and Garden Equipment (CARB 2003). The CalEEMod software estimates that landscaping equipment operate for 250 days per year in the Basin. Emissions of VOCs from the use of consumer products and architectural coatings are based on SCAQMD-specific emission factors for land uses in the Basin.

Operational-source emissions are summarized in Table 3, Maximum Unmitigated Regional Operational Emissions (Pounds per Day). As shown, project operational-source emissions are below the applicable SCAQMD regional thresholds of significance (SCAQMD 2015). Therefore, impacts would be considered less than significant, and no mitigation is required.

The SCAQMD’s approach for assessing cumulative impacts related to operations is based on attainment of ambient air quality standards in accordance with the requirements of the federal and California Clean Air Acts. As discussed earlier, the SCAQMD has developed a comprehensive plan, the 2016 AQMP, which addresses the region’s cumulative air quality condition.

| Table 3  Maximum Unmitigated Regional Operational Emissions (Pounds per Day) | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| Source | Emissions (pounds per day) | | | | | |
| VOC | NOX | CO | SOX | PM10 | PM2.5 |
| Area (Consumer Products, Landscaping) | 3 | <1 | <1 | <1 | <1 | <1 |
| Energy (Natural Gas) | <1 | <1 | <1 | <1 | <1 | <1 |
| Motor Vehicles | 1 | 1 | 14 | <1 | <1 | <1 |
| Total Project On-Site and Off-Site Emissions | **4** | **2** | **14** | **<1** | **<1** | **<1** |
| SCAQMD Regional Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| Threshold Exceeded? | No | No | No | No | No | No |
| NOTES:  Totals may not add up exactly due to rounding in the modeling calculations. Refer to **Appendix A** of this IS/MND for details.  SOURCE: ESA 2022 | | | | | | |

A significant impact may occur if a project were to add a cumulatively considerable contribution of a federal or State non-attainment pollutant. The Basin is currently in non-attainment for ozone (federal and State standards), PM10 (State standards only) and PM2.5 (federal and State standards); therefore, related projects could cause ambient concentrations to exceed an air quality standard or contribute to an existing or projected air quality exceedance. Cumulative impacts to air quality are evaluated under two sets of thresholds for CEQA and SCAQMD. In particular, CEQA Guidelines Section 15064(h)(3) provides guidance in determining the significance of cumulative impacts. Specifically, CEQA Guidelines Section 15064(h)(3) states in part that:

A lead agency may determine that a project’s incremental contribution to a cumulative effect is not cumulatively considerable if the project will comply with the requirements in a previously approved plan or mitigation program which provides specific requirements that will avoid or substantially lessen the cumulative problem (e.g., water quality control plan, air quality plan, integrated waste management plan) within the geographic area in which the project is located. Such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency …

For purposes of the cumulative air quality analysis with respect to CEQA Guidelines Section 15064(h)(3), the proposed project’s incremental contribution to cumulative air quality impacts is determined based on compliance with the SCAQMD adopted 2016 AQMP. As discussed previously under Section III (a) above, the proposed project would be consistent with the 2016 AQMP and would not have a cumulatively considerable air quality impact. Although the proposed project’s employment would increase compared to existing conditions, this growth would be well within the employment projections for the City.

As the proposed project is not part of an ongoing regulatory program, the SCAQMD also recommends that project-specific air quality impacts be used to determine the potential cumulative impacts to regional air quality. As shown in Table 2 and Table 3, peak daily emissions of construction and operation-related pollutants would not exceed SCAQMD regional significance thresholds. By applying SCAQMD’s cumulative air quality impact methodology, even though implementation of the proposed project would result in an addition of criteria pollutants, in conjunction with related projects in the region, cumulatively significant impacts would not occur. Therefore, the emissions of non-attainment pollutants and precursors generated by the proposed project would be less than significant and would not result in a cumulatively considerable air quality impact.

c) According to the SCAQMD CEQA Air Quality Handbook, sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes.

The localized effects from the on-site portion of the emissions were evaluated at nearby sensitive receptor locations potentially impacted by the proposed project according to the SCAQMD’s Localized Significance Threshold Methodology (June 2003, revised July 2008), which relies on on-site mass emission rate screening tables and project-specific dispersion modeling, which may be used for sites greater than 5 acres or for projects that exceed the screening tables, as appropriate (SCAQMD 2008). LSTs represent the maximum emissions from a project site that are not expected to result in an exceedance of a NAAQS or CAAQS.

The LSTs are applicable to NOX, CO, PM10, and PM2.5. For NOX and CO, the thresholds are based on the ambient air quality standards. For PM10 and PM2.5, the thresholds are based on requirements in SCAQMD Rule 403 (Fugitive Dust) for construction and Rule 1303 (New Source Review Requirements) for operations. The SCAQMD has established screening criteria that can be used to determine the maximum allowable daily emissions that would satisfy the LSTs and, therefore, not cause or contribute to an exceedance of the applicable ambient air quality standards without project-specific dispersion modeling. The screening criteria depend on: (1) the area in which the project is located, (2) the size of the project area, and (3) the distance between the project area and the nearest sensitive receptor (e.g., residences, schools, hospitals). For the proposed project, the appropriate Source Receptor Area (SRA) for the LSTs is the South Los Angeles County Coastal monitoring station (SRA 4). The nearest sensitive receptors to the proposed project are the residential uses located 50 feet to the north of the project site. Since the total acreage disturbed is less than 5 acres, the LST analysis were based on the SCAQMD’s look-up tables for a 2.80-acre site in SRA 4 with sensitive receptors located 25 meters (82 feet) from the project site (June 2003, revised July 2008).[[3]](#footnote-4)

The localized effects from the on-site portion of the proposed project’s daily emissions were evaluated at the sensitive receptor locations that would be potentially impacted by the proposed project according to the SCAQMD’s LST methodology. SCAQMD’s Methodology clearly states that “off-site mobile emissions from the project should not be included in the emissions compared to LSTs.” Therefore, for purposes of the LST analysis, only emissions included in the CalEEMod “on-site” emissions outputs were considered, plus the truck idling emissions (e.g., haul trucks and vendor trucks) that were calculated separately using the EMFAC emission factors for heavy-heavy-duty (HHD) vehicles. Daily localized emissions caused by the proposed project were compared to the LSTs in the SCAQMD’s look-up tables to determine whether the emissions would cause violations of ambient air quality standards.

###### Construction Emissions

Localized Construction Emissions

Table 4, Maximum Daily Localized Construction Emissions, presents the localized emissions from on-site equipment during the construction of the proposed project, located 25 meters (82 feet) north of the project site, in the vicinity of the project area without mitigation.

| Table 4  Maximum Daily Localized Construction Emissions | | | | |
| --- | --- | --- | --- | --- |
| Year | Emissions (pounds per day) | | | |
| NOX | CO | PM10 | PM2.5 |
| Construction Phases | | | | |
| Demolition & Site Preparation – 2023 | 15 | 21 | 1 | 1 |
| Grading/Excavation – 2023 | 52 | 42 | 4 | 2 |
| Drainage/Utilities/Trenching – 2023 | 19 | 26 | 1 | 1 |
| Foundations/Concrete Pour – 2023 | 15 | 21 | 1 | 1 |
| Building Construction – 2023 | 29 | 36 | 1 | 1 |
| Building Construction – 2024 | 27 | 36 | 1 | 1 |
| Architectural Coating – 2023 | 3 | 4 | <1 | <1 |
| Architectural Coating – 2024 | 3 | 4 | <1 | <1 |
| Landscaping – 2023 | <1 | 2 | <1 | <1 |
| Landscaping – 2024 | <1 | 2 | <1 | <1 |
| Paving – 2024 | 18 | 26 | 1 | 1 |
| Overlapping Phases | | | | |
| Building Construction – 2023 + Architectural Coatings – 2023 + Landscaping – 2023 | 32 | 42 | 2 | 1 |
| Building Construction – 2024 + Paving – 2024 + Architectural Coating 2024 + Landscaping – 2024 | 48 | 67 | 2 | 2 |
| Building Construction – 2024 + Architectural Coating 2024 + Landscaping – 2023 | 48 | 42 | 2 | 1 |
| Project Maximum Daily Emissions | 52 | 67 | 4 | 2 |
| SCAQMD LST Significance Thresholds | 82 | 842 | 7 | 5 |
| Exceeds Thresholds | No | No | No | No |
| NOTE:  Totals may not add up exactly due to rounding in the modeling calculations. Refer to **Appendix A** of this IS/MND for details.  SOURCE: ESA 2022 | | | | |

Based on the results summarized in Table 4, the unmitigated project impacts would not exceed the LSTs.

###### Operational Emissions

According to SCAQMD LST methodology, LSTs would apply to the operational phase of a project, if the project includes stationary sources, or attracts mobile sources. With regard to on-site sources of emissions, the proposed project would generate emissions from area sources located on-site such as natural gas combustion from water heaters, cooking stoves, landscaping equipment, and use of consumer products. **Table 5**, *Maximum Daily Localized Operational Emissions*, presents the localized emissions from on-site equipment during the operation of the proposed project.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Table 5  Maximum Daily Localized Operational Emissions | | | | |
| Operational Activity | NOX | CO | PM10 | PM2.5 |
| Area | <1 | <1 | <1 | <1 |
| Energy (Natural Gas) | <1 | <1 | <1 | <1 |
| Project Maximum Daily Emissions | <1 | <1 | <1 | <1 |
| SCAQMD LST Significance Thresholds | 82 | 842 | 2 | 1 |
| Exceeds Thresholds | No | No | No | No |
| NOTE:  Totals may not add up exactly due to rounding in the modeling calculations. Refer to **Appendix A** of this IS/MND for details.  SOURCE: ESA 2022 | | | | |

###### CO “Hot Spot” Analysis

A CO hotspot is an area of localized CO pollution that is caused by severe vehicle congestion on major roadways, typically near intersections. While construction-related traffic on the local roadways would occur during construction, the net increase of construction worker vehicle trips to the existing daily traffic volumes on the local roadways would be relatively small and would not result in CO hotspots. Additionally, the construction-related vehicle trips would be short-term, and ceased once construction activities are completed. During operation, as presented in the proposed project’s LTA, the proposed project would include a total of 580 trips to the project site per day. Overall, the proposed project would not cause or contribute to the formation of CO hotspots based on the AQMP’s 2003 study, which estimates 100,000 vehicles per day could cause the formation of a CO hotspot (SCAQMD 2003a). Therefore, impacts would be less than significant.

###### Toxic Air Contaminants

Concentrations of toxic air contaminants (TACs), or in federal parlance, hazardous air pollutants (HAPs), are also used as indicators of ambient air quality conditions. A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations.

Intermittent construction activities associated with the proposed project would result in short-term emissions of diesel particulate matter, which the State has identified as a TAC. During construction, the exhaust of off-road heavy-duty diesel equipment would emit diesel particulate matter (DPM) during general construction activities, such as excavation, materials transport and handling, and building construction. During operational activities DPM would be emitted by the diesel trucks traveling to, on, and from the project site.

Diesel particulate matter poses a carcinogenic health risk that is generally measured using an exposure period of 30 years for sensitive residential receptors, according to the California Environmental Protection Agency, Office of Environmental Health Hazard Assessment (OEHHA) Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments (OEHHA Guidance), which was updated in 2015 with new exposure parameters including age sensitivity factors (OEHHA 2015). Sensitive receptors include residential uses located approximately 50 feet north of the project site, the Perry Street Mini-Park located approximately 100 feet to the northeast, residences located approximately 65 feet east and additional residences located approximately 252 feet southeast of the project site across East Carson Street.

Construction

Temporary TAC emissions associated with DPM emissions from heavy construction equipment would occur during construction activities. According to OEHHA and the SCAQMD’s Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis, (SCAQMD 2003b) health effects from TACs are described in terms of individual cancer risk based on a lifetime (i.e., 70-year) resident exposure duration. Given the temporary and short-term construction schedule (approximately 13 months), the proposed project would not result in a long-term (i.e., lifetime or 70-year) exposure as a result of construction activities.

The proposed project would be consistent with the applicable 2016 AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities. The proposed project would comply with regulatory control measures including the CARB Air Toxics Control Measure (ATCM) that limits diesel powered equipment and vehicle idling to no more than 5 minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation that requires fleets to retire, replace, or repower of older, dirtier engines with newer emission-controlled models; compliance with these would minimize emissions of TACs during construction. SCAQMD recommends that construction health risk assessments be conducted for substantial sources of DPM emissions (e.g., earth-moving construction activities) in proximity to sensitive receptors and has provided guidance for analyzing mobile source diesel emissions. Although, sensitive receptors, including single-residential uses, are located to the north of the project site, localized DPM emissions (strongly correlated with PM2.5 emissions) are less than significant (as shown in Table 4, above). Although the localized analysis does not directly measure health risk impacts, it does provide data that can be used to evaluate the potential to cause health risk impacts. The low level of PM2.5 emissions coupled with the relatively short-term duration of construction activity anticipated at 13 months resulted in an overall low level of DPM concentrations in the project area. Furthermore, compliance with the aforementioned CARB ATCM anti-idling measure further minimizes DPM emissions in the project area. Thus, although there are sensitive receptors located within proximity to the project site, compliance with regulatory control measures and the limited duration of construction activities would minimize exposures.

Operations

SCAQMD recommends that health risk assessments be conducted for substantial sources of operational DPM emissions (e.g., truck stops and warehouse distribution facilities that generate more than 100 trucks per day or more than 40 trucks with operating transport refrigeration units) and has provided guidance for analyzing mobile source diesel emissions (SCAQMD 2003b). During operational activities DPM would be emitted by the diesel trucks traveling to, on, and from the site. However, the land uses that would be developed under the proposed project are not considered a substantial source of operational DPM as described by the SCAQMD. Therefore, the project operations associated with the storage facility or retail uses would generate only minor amounts of diesel emissions from mobile sources, such as delivery/box trucks and occasional maintenance activities that would not exceed 100 trucks per day or more than 40 trucks with operating transport refrigeration units. Furthermore, project trucks would be required to comply with the applicable provisions of the CARB 13 California Code of Regulations, Section 2025 (Truck and Bus regulation) to minimize and reduce PM and NOX emissions from existing diesel trucks. Therefore, project operations would not be considered a substantial source of diesel particulates. Furthermore, typical sources of hazardous TACs include industrial manufacturing processes and automotive repair facilities. The proposed project would not include any of these potential sources, although minimal emissions may result from the use of consumer products (e.g., aerosol sprays). Project operations would only result in minimal emissions of toxic air contaminants from the use of architectural coatings and other products. The use of consumer products and architectural coatings from the office use would be expected to generate minimal emissions. The proposed project’s land uses would not include installation of industrial-sized equipment (i.e., paint booths) or require extensive use of commercial or household cleaning products. Based on this, the proposed project is not expected to release substantial amounts of TACs.

Therefore, based on the limited activity of TAC sources and TAC concentrations at off-site sensitive receptors relative to existing conditions, the proposed project would not warrant the need for a health risk assessment associated with on-site activities, and potential TAC impacts would be less than significant.

d) Potential sources that may emit odors during construction activities include construction equipment exhaust and the use of architectural coatings and solvents. According to the SCAQMD CEQA Air Quality Handbook, construction equipment is not a typical source of odors. SCAQMD Rule 1113 limits the amount of VOCs from architectural coatings and solvents. Further, construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of construction. Through adherence with mandatory compliance with SCAQMD Rules, no construction activities or materials would create objectionable odors. The nearest sensitive receptors are single-family residences located approximately 50 feet to the north of the project site along East 215th Place. The proposed project’s uses would not typically generate nuisance odors at nearby sensitive receptors.

According to the SCAQMD CEQA Air Quality Handbook, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting operations, refineries, landfills, dairies, and fiberglass molding facilities. The proposed project does not include any of the land uses associated with odor complaints.

Furthermore, as discussed in Thresholds b and c, above, construction and operational emissions would not exceed the SCAQMD regional significance thresholds for attainment, maintenance, or unclassifiable criteria air pollutants (i.e., CO and SO2).

Therefore, impacts related to other emissions, including those that would lead to odors adversely affecting a substantial number of people, would be less than significant.

#### IV. Biological Resources

| ***Issues (and Supporting Information Sources)*** | ***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? |  |  |  |  |
| 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? |  |  |  |  |
| 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? |  |  |  |  |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? |  |  |  |  |
| e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? |  |  |  |  |
| f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? |  |  |  |  |

This section is based in part on the 21611 Perry Street Self Storage Project Memorandum (Biological Resources Memorandum), prepared by Environmental Science Associates (ESA), dated December 2021 (refer to **Appendix B** of this IS/MND).

##### Discussion

a) The project site is located within the City of Carson in an urbanized area on two parcels, which are currently vacant and undeveloped. The project site consists of sparse ruderal vegetation with plantings of carrotwood (*Cupaniopsis anacardioides*) as street trees along South Perry Street. A California Natural Diversity Database (CNDDB) and California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants records search was conducted for the project site and the results are summarized in the Biological Resources Memorandum. As discussed therein, the project site does not contain suitable habitat for 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 Project. The Biological Resources Memorandum found that only two special-status plant species were determined to have a low potential to occur within the project site. Therefore, less than significant impacts to candidate, sensitive, or special-status species would occur, and no mitigation measures are required.

b) The project site and surrounding area are located in an urbanized setting. There are no drainage channels on the project site to the adjacent Dominguez Channel. In addition, the project site does not contain riparian habitat and there are no other sensitive natural communities as indicated in the City or regional plans or in regulations by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS). Therefore, no impact would occur to riparian habitat or a natural community.

c) As discussed above, in the response to Threshold (a), the project site is located in an urbanized area on two parcels, which are currently vacant and undeveloped. The surrounding area has been fully developed with urban uses and associated infrastructure. The project site does not contain any wetlands as defined by Clean Water Act Section 404. Thus, because the project site does not contain any wetland features no impact would occur.

d) The project site is located within the City of Carson in an urbanized area on two parcels, which are currently vacant and undeveloped. As described above under response to Threshold (a), above, the project site consists of sparse ruderal vegetation with plantings of carrotwood (*Cupaniopsis anacardioides*) as street trees along South Perry Street. The street tree, which are not native or protected as defined by CMC Section 3901, may be removed as part of this proposed project. However, these street trees have the potential to provide suitable nesting habitat for migratory birds and raptors protected under the Federal Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code. The MBTA and California Fish and Game Code prohibit the take or destruction of migratory birds/raptors, their nests, and/or eggs. Impacts on nesting birds protected by the MBTA and similar provisions of the Fish and Game Code could occur if work is conducted during the breeding season (February 1 through August 15). However, the proposed project would adhere to all existing laws and regulations, including compliance with the MBTA as provided in Mitigation Measure MM-BIO-1, which would minimize any potential impacts to migratory birds or raptors as a result of tree removal.

In addition, due to the urbanized nature of the project site and surrounding area, the lack of a major water body, and the lack of natural open space area on the project site, the project site does not otherwise contain substantial habitat for native resident or migratory species, or native nursery sites. Therefore, the proposed project would not interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites, and no impact would occur. Mitigation Measure MM-BIO-1 is identified to ensure that potentially significant impacts to migratory birds or raptors are reduced to a less-than-significant level.

###### Mitigation Measure

MM-BIO-1. Pre-construction (vegetation removal) avian nesting surveys shall be conducted during the breeding season. A qualified avian biologist shall conduct these surveys within 7 days of vegetation and tree removal. The surveying biologist must be qualified to determine the species, status, and nesting stage without causing intrusive disturbance. The survey shall cover all reasonably potential nesting locations on and within 300 feet of the project site. If active nests are found, a no-disturbance buffer (300 feet for raptors and 50 feet for other birds, or as otherwise determined in consultation with CDFW shall be created around the active nests. If construction is scheduled to occur during the non-nesting season (August 16 to January 31), no preconstruction surveys or additional measures are required.

e) As discussed above, the project site is located in an urbanized area of the City of Carson in an urbanized area, on two parcels, which are currently vacant and undeveloped. The potential removal of the non-protected and non-native existing street trees would occur in compliance with all existing laws and regulations, including the MBTA. Thus, the proposed project would not interfere with local biological preservation policies or ordinances and no impact would occur.

f) As discussed above, the project site is located in an urbanized area of the City of Carson on two parcels, which are currently vacant and undeveloped. No candidate, sensitive, or special-status species habitats occur on or in proximity to the project site. The project site is not located within an area designated within a habitat conservation plan, natural community conservation plan, or other approved local, regional, or State habitat conservation plan (CDFW 2022). Thus, the proposed project would not conflict with the provisions of any adopted conservation plan and no impact would occur.

#### V. Cultural Resources

| ***Issues (and Supporting Information Sources)*** | ***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? |  |  |  |  |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? |  |  |  |  |
| c) Disturb any human remains, including those interred outside of formal cemeteries? |  |  |  |  |

This section is based on the 21611 Perry Street Self Storage, Cultural Resources Assessment Report, located in **Appendix C** of this IS/MND. Appendix C is confidential and not for public distribution.

##### Discussion

a) A historical resource is defined in CEQA Guidelines Section 15064.5(a)(3) as any object, building, structure, site, area, place, record, or manuscript determined to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Historical resources are further defined as those associated with significant events, important persons, or distinctive characteristics of a type, period or method of construction; representing the work of an important creative individual; or possessing high artistic values. Resources listed in or determined eligible for the California Register, included in a local register, or identified as significant in a historic resource survey are also considered historical resources under CEQA. The site is currently two vacant parcels and therefore no historic-age architectural resources exist within the project site; therefore, the proposed project would have no direct impact on known historical resources. No known significant archaeological resources that could be historical resources under CEQA are known to exist within the project site. The potential for impacts to significant archaeological resources is further addressed below in Section V (b). The records search revealed that one cultural resource has been previously recorded within the 0.5-mile radius of the project site. This resource is a historic-period built environmental resource consisting of the Shell Oil Refinery complex located approximately 0.20 miles north of the project site. The record search results did not indicate that any recorded historical resources were located in the immediate project vicinity, and no structures meeting the 45‑year California Office of Historic Preservation (OHP) threshold for historic resources were found in the immediate vicinity of the project site. As such, the proposed project would not have indirect impacts to any known historical resources. The adjacent Dominguez Channel is listed in the Built Environment Resources Directory (BERD) for potential eligibility as a District. There was no additional information available on the District. However, the proposed project would not impact the Dominguez Channel or related flood control components such as access roads as there would not be any project components within these areas. Further, as described above, the project site was formerly developed with a large single-story warehouse building that included commercial/industrial uses next to the Dominguez Channel and the proposed project would have a similar development consisting of a mix of one- and two-story buildings of similar size and massing to the former development, which was present after the channel was developed until the warehouse complex was demolished in 2011, and did not impact the Dominguez Channel’s potential eligibility (refer to Appendix C of this IS/MND). The channel passes through a heavily developed urban and industrial area and the addition of the proposed project would not change the landscape surrounding the Dominguez Channel and would not impact the potential eligibility of a District nor would it impact the portion of the channel that passes by the project site. Therefore, no impact would occur.

b) CEQA Guidelines Section 15064.5(a)(3)(D) generally defines archaeological resources as any resource that “has yielded, or may be likely to yield, information important in prehistory or history.” Archaeological resources are features, such as tools, utensils, carvings, fabric, building foundations, etc., that document evidence of past human endeavors and that may be historically or culturally important to a significant earlier community.

A records search for the project site was received from the South Central Coastal Information Center (SCCIC) on December 7, 2021. The records search included a review of all recorded archaeological resources and previous studies within a 0.5-mile radius of the project site. The records search results indicate five cultural resources studies have been conducted within the records search radius. The entirety of the 0.5-mile records search radius has been included in previous cultural resources studies. Of the five previous studies, one (LA-04512) overlaps the entirety of the project site. This study is a cultural resources inventory of the City conducted in 1977 and included extensive archival research and field survey of accessible parcels within the City. In reviewing the report, it is difficult to discern if the project site was included as part of the inventory’s field survey. The records search revealed that one cultural resource (P-19-188395) has been previously recorded within the 0.5-mile radius of the project site. This resource is a historic-period built environment resource consisting of the Shell Oil Refinery complex located approximately 0.20 miles north of the project site. No resources have been recorded within the project site. A survey of the project site further did not result in the recordation of any additional resources.

The project site has been subject to a number of previous disturbances, which is reflected by the presence of artificial fill as identified as a result of geotechnical borings. Additionally, a remediation program was carried out in 2014 to remediate 7,255.69 tons of contaminated soil from four discrete locations within the project site (**Figure 2-5,** *Remediation Areas*). These four areas were excavated to depths ranging from 5 to 8 feet deep to remove petroleum hydrocarbons and volatile organic compounds from the project site. Following the removal of the contaminated soils, the excavated areas were backfilled with imported clean fill or with a mix of crushed concrete and imported fill. Project-related ground disturbance within the artificial fill is not likely to encounter subsurface archaeological resources; however, there may exist pockets of undisturbed sediments within the project site, outside of the remediation areas or below the remediation areas that may contain subsurface archaeological deposits.

Figure 2‑5 Remediation Areas

Should these potential deposits be present they may qualify as historical resources or unique archaeological resources pursuant to CEQA.

In order to avoid significant impacts to any historical or unique archaeological resources that may be present, it is recommended that an archaeological monitor be present during initial ground-disturbing activities, including grubbing and other methods of de-vegetation, in order to assess surface and subsurface conditions outside or below the remediation areas. Based on observations made by the archaeological monitor, monitoring activities may be modified or discontinued at the recommendation of the archaeologist. Additionally, it is recommended that protocols for work stoppage in the event that archaeological resources or human remains are encountered during construction should be implemented.

Based on these results, Mitigation Measure MM-CULT-1 is identified to ensure that potentially significant impacts to archaeological resources are reduced to a less-than-significant level.

###### Mitigation Measure

MM-CULT-1. Prior to issuance of demolition permit, the Applicant shall retain a qualified Archaeologist who meets the Secretary of the Interior’s Professional Qualifications Standards (Qualified Archaeologist) to oversee an archaeological monitor who shall be present during construction excavations such as demolition, clearing/grubbing, grading, trenching, or any other construction excavation activity associated with the proposed project that occur outside or below the remediation areas. The frequency of monitoring shall be based on the rate of excavation and grading activities, proximity to known archaeological resources, the materials being excavated (younger alluvium vs. older alluvium), and the depth of excavation, and if found, the abundance and type of archaeological resources encountered, as determined by the Qualified Archaeologist. Full-time field observation can be reduced to part-time inspections or ceased entirely if determined appropriate by the Qualified Archaeologist. Prior to commencement of excavation activities, an Archaeological and Cultural Resources Sensitivity Training shall be given for construction personnel. The training session, shall be carried out by the Qualified Archaeologist and shall focus on how to identify archaeological and cultural resources that may be encountered during earthmoving activities and the procedures to be followed in such an event.

In the event that historic or prehistoric archaeological resources (e.g., bottles, foundations, refuse dumps, Native American artifacts or features, etc.) are unearthed, ground-disturbing activities shall be halted or diverted away from the vicinity of the find so that the find can be evaluated. An appropriate buffer area shall be established by the Qualified Archaeologist around the find where construction activities shall not be allowed to continue. Work shall be allowed to continue outside of the buffer area. All archaeological resources unearthed by project construction activities shall be evaluated by the Qualified Archaeologist and a Gabrieleño Band of Mission Indians – Kizh Nation Monitor. If the resources are Native American in origin, the Kizh Nation shall consult with the City and Qualified Archaeologist regarding the treatment and curation of any prehistoric archaeological resources. If a resource is determined by the Qualified Archaeologist to constitute a “historical resource” pursuant to CEQA Guidelines Section 15064.5(a) or a “unique archaeological resource” pursuant to Public Resources Code Section 21083.2(g), the Qualified Archaeologist shall coordinate with the Applicant and the City to develop a formal treatment plan that would serve to reduce impacts to the resources. The treatment plan established for the resources shall be in accordance with CEQA Guidelines Section 15064.5(f) for historical resources and Public Resources Code Section 21083.2(b) for unique archaeological resources. The treatment plan shall incorporate the Kizh Nation’s treatment and curation recommendations. Preservation in place (i.e., avoidance) is the preferred manner of treatment. If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resource along with subsequent laboratory processing and analysis. The treatment plan shall include measures regarding the curation of the recovered resources that may include curation at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material and/or the Kizh Nation. If no institution or the Kizh Nation accepts the resources, they may be donated to a local school or historical society in the area (such as the Culver City Historical Society) for educational purposes.

Prior to the release of the grading bond, the Qualified Archaeologist shall prepare a final report and appropriate California Department of Parks and Recreation Site Forms at the conclusion of archaeological monitoring. The report shall include a description of resources unearthed, if any, treatment of the resources, results of the artifact processing, analysis, and research, and evaluation of the resources with respect to the California Register of Historical Resources and CEQA. The report and the Site Forms shall be submitted by the Applicant to the City, the South Central Coastal Information Center, and representatives of other appropriate or concerned agencies to signify the satisfactory completion of the proposed project and required mitigation measures.

c) The California Native American Heritage Commission (NAHC) was contacted on November 2, 2021, to request a search of the Sacred Lands File (SLF). The NAHC responded to the request in a letter dated December 16, 2021, with the results of the SLF search conducted by the NAHC, which indicated a negative search result. The NAHC provided a list of tribes who could be contacted for information regarding known and recorded sites.

Archival research did not reveal any evidence that human remains could be found at the project site or in the area adjacent to the project site. Even so, construction of the proposed project could potentially disturb previously unknown human remains. Implementation of Mitigation Measures MM-CULT-2 and MM-CULT-3 would ensure impacts related to the discovery of human remains would be reduced to a less than significant level.

###### Mitigation Measure

MM-CULT-2. If human remains are encountered unexpectedly during implementation of the proposed project, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the NAHC. The NAHC shall then identify the person(s) thought to be the Most Likely Descendent (MLD). The MLD may, with the permission of the land owner, or his or her authorized representative, inspect the site of the discovery of the Native American remains and may recommend to the owner or the person responsible for the excavation work means for treating or disposing, with appropriate dignity, the human remains and any associated grave goods. The MLD shall complete their inspection and make their recommendation within 48 hours of being granted access by the land owner to inspect the discovery. The recommendation may include the scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Upon the discovery of the Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred, as prescribed in this mitigation measure, with the MLD regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants’ preferences for treatment.

If the NAHC is unable to identify a MLD, or the MLD identified fails to make a recommendation, or the landowner rejects the recommendation of the MLD and the mediation provided for in Public Resources Code Section 5097.94, subdivision (k), if invoked, fails to provide measures acceptable to the landowner, the landowner or his or her authorized representative shall inter the human remains and items associated with Native American human remains with appropriate dignity on the facility property in a location not subject to further and future subsurface disturbance.

MM-CULT-3. In the case of human remains findings (as mitigated under MM-CULT-2), should the remains be determined to be Native American and should the Kizh Nation be recommended by the NAHC as Most Likely Descendant (MLD), then the following policy shall apply. Should the Kizh Nation not be named MLD by the NAHC other procedures may be required by the assigned MLD. As the MLD, the Koo-nas-gna Burial Policy shall be implemented. To the Kizh Nation, the term “human remains” encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the preparation of the soil for burial, the burial of funerary objects with the deceased, and the ceremonial burning of human remains. If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be created. The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all sacred materials. In the case where discovered human remains cannot be fully documented and recovered on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours. The Kizh Nation will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, it may be determined that burials will be removed. In the event preservation in place is not possible despite good faith efforts by the project applicant/developer and/or landowner, before ground-disturbing activities may resume on the project site, the landowner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects. Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on-site if possible. These items should be retained and reburied within 6 months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Kizh Nation and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered. The Kizh Nation will work closely with the project’s qualified archaeologist to ensure that the excavation is treated carefully, ethically and respectfully. If data recovery is approved by the Kizh Nation, documentation shall be prepared and shall include (at a minimum) detailed descriptive notes and sketches. All data recovery data recovery-related forms of documentation shall be approved in advance by the Kizh Nation. If any data recovery is performed, once complete, a final report shall be submitted to the Kizh Nation and the NAHC. The Kizh Nation does NOT authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains.

#### VI. Energy

| ***Issues (and Supporting Information Sources)*** | ***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? |  |  |  |  |
| b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency? |  |  |  |  |

##### Discussion

a) The proposed project would consume energy during construction activities primarily from on- and off-road vehicle fuel consumption in the form of diesel and gasoline and electricity from water conveyance for dust control. Project operation would consume energy from energy use from general building operations, including HVAC systems and lighting, and from mobile sources. The analysis below includes the proposed project’s energy requirements and energy use efficiencies by energy type for each stage of the proposed project (construction and operations).

###### Construction

Construction of the proposed project would result in energy demand primarily from off-road equipment and on-road vehicle fuel consumption (diesel and gasoline) and secondarily from electricity for conveying water used for dust suppression and for a temporary on-site construction office/trailer. The analysis below includes the proposed project’s energy requirements and energy use efficiencies by energy type for each stage of the proposed project.

The estimated fuel usage for off-road equipment is based on the number and type of equipment that would be used during construction activities, hour usage estimates, the total duration of construction activities, and hourly equipment fuel consumption factors from the California Air Resources Board (CARB) OFFROAD model, which was used in the proposed project’s air quality analysis. On-road vehicles would include trucks to haul material to and from the project site, vendor trucks to deliver supplies necessary for project construction, water trucks for dust control, and fuel used for employee commute trips. The estimated fuel usage for on-road vehicles is based on the number of trucks and employee commute trips that would occur during construction activities and per mile fuel consumption factors from the CARB on-road vehicle emissions factor (EMFAC) model, which was used in the proposed project’s air quality analysis. Electricity used for a portable construction office was calculated using energy intensity factors from CalEEMod and electricity from water conveyance for dust control was calculated using assumptions for gallons used per acre per day and CalEEMod water conveyance intensity factors applied to calculate total construction electricity consumption. Construction activities typically do not involve the consumption of natural gas. Table 6, Summary of Energy Consumption During Project Construction, summarizes the proposed project’s total and annual fuel and electricity consumption from construction activities.

Table 6  
 Summary of Energy Consumption During Project Construction

|  |  |
| --- | --- |
| Fuel Type | Quantity |
| Gasoline | gallons |
| On-Road Construction (Workers) | 18,942 |
| Total Gasoline (13 months) |  |
| Diesel | gallons |
| On-Road Construction Equipment | 4,132 |
| Off-Road Construction Equipment | 83,758 |
| Total Diesel (13 months) | 87,890 |
| Electricity | MWh |
| Water Conveyance for Dust Control | 3.5 |
| Total Electricity (13 months) | 3.5 |
| Annualized Gasoline Use (gal) | 17,459 |
| Annualized Diesel Use (gal) | 81,010 |
| Annualized Electricity (MWh) | 3.5 |
| NOTES:  gal = gallons; MWh = megawatt-hours  SOURCE: ESA 2022 | |

As shown in Table 6**,** annual average construction electricity usage would be approximately 3.5 megawatt-hours (MWh). This amount is within the supply and infrastructure capabilities of Southern California Edison (SCE), the electricity provider for the project site, which had a net energy load of 87,143 gigawatt-hours (GWh) in 2020 (SCE 2019).[[4]](#footnote-5) The electricity demand at any given time would vary throughout the construction period based on the construction activities being performed, and would cease upon completion of construction. Electricity use from construction would be short-term, limited to working hours, used for necessary construction-related activities, and represent a small fraction of the proposed project’s annual operational electricity. Construction electricity usage of the proposed project would consume approximately 0.004 percent of SCE’s total load and would not cause additional strain on SCE’s electricity load. When not in use, electric equipment would be powered off so as to avoid unnecessary energy consumption. Furthermore, the electricity used for off-road light construction equipment would have the co-benefit of reducing construction-related air pollutant and GHG emissions from more traditional construction-related energy in the form of diesel fuel. Therefore, impacts from construction electrical demand would be less than significant and would not result in the wasteful, inefficient, and unnecessary consumption of energy.

The energy use summary provided above in Table 6 represents the amount of energy that could potentially be consumed during project construction based on a conservative set of assumptions, provided in **Appendix D** of this IS/MND. As shown, on- and off-road vehicles would consume an estimated annual average of 17,459 gallons of gasoline and approximately 81,010 gallons of diesel fuel throughout the proposed project’s construction. For comparison purposes, the fuel usage during project construction would represent approximately 0.00015 percent of the 2020 annual on-road gasoline-related energy consumption and 0.005 percent of the 2019 annual diesel fuel-related energy consumption in California.

###### Operations

During operation of the proposed project, energy would be consumed for multiple purposes, including, but not limited to HVAC equipment, lighting, and the use of electronics. Energy would also be consumed during project operations related to water usage, solid waste disposal, and vehicle trips. Table 7, Project Operational Energy Usage, summarizes the proposed project’s operational energy consumption.

| Table 7  Project Operational Energy Usage | |
| --- | --- |
| Energy Typea | Annual Quantityb |
| Electricity | |
| Proposed Project: |  |
| Building Energy | 530 MWh |
| Water Conveyance | 353 MWh |
| Total Electricity | 883 MWh |
| Natural Gas | |
| Proposed Project: |  |
| Building Energy | 0.46 million cf |
| Total Natural Gas | 0.46 million cf |
| Transportation | |
| Proposed Project: |  |
| Gasoline | 44,972 gallons |
| Diesel | 4,509 gallons |
| Natural Gas | 71 gallons |
| Total Transportation – Gasoline | 44,972 gallons |
| Total Transportation – Diesel | 4,509 gallons |
| Total Transportation – Natural Gas | 71 gallons |
| NOTES:  MWh = megawatt-hours; million cf = million cubic feet  Detailed calculations are provided in **Appendix D** of this IS/MND.  a Project electricity and natural gas estimates assume compliance with applicable 2019 Title 24 and CALGreen requirements.  b Totals may not add up due to rounding of decimals.  SOURCE: ESA 2022 | |

The proposed project would increase demand for electricity including what is needed to support building operations. As shown in Table 7, the proposed project would result in an annual consumption of electricity of approximately 883 MWh per year, which would represent approximately 0.001 percent of SCE’s total sales of 87,143 GWh in 2020 (SCE 2019).

The proposed project has been evaluated for consistency with the Energy Efficiency Climate Action Plan (EECAP). According to the EECAP, the City is in the process of implementing strategies to reduce energy consumption across sections, which includes promoting commercial energy retrofits, increasing energy efficiency through water efficiency, and decreasing energy demand through reducing the urban heat island effect (City of Carson 2015). Consistent with this strategy, the proposed project would install lighting and a ventilation system that conforms to the CALGreen Code and 2019 Title 24 Standards. In addition, the proposed project would include approximately 12,134 square feet of landscaping around the perimeter of the project site. These features would be consistent with energy reduction strategies in the City’s EECAP. Therefore, with the incorporation of these features, operation of the proposed project would not result in the wasteful, inefficient, and unnecessary consumption of electricity, and impacts would be less than significant.

The proposed project would increase the demand for natural gas resources. As shown in Table 7, the proposed project’s estimated operational natural gas demand is 0.46 million cubic feet, which represents 0.019 percent of Southern California Gas Company’s (SoCalGas’s) projected supply of 2,462 million cubic feet in 2024 (California Gas and Electric Utilities 2020). As would be the case with electricity, the proposed project would comply with the applicable provisions of Title 24, City of Carson’s EECAP, and the CALGreen Code in effect at the time of building occupancy to minimize natural gas demand. As such, the proposed project would minimize energy demand. Therefore, with the incorporation of these features, operation of the proposed project would not result in the wasteful, inefficient, and unnecessary consumption of natural gas, and impacts would be less than significant.

The proposed project would increase demand for transportation fuels relative to existing site conditions for gasoline and diesel. During daily operations, the proposed project would have a maximum of 580 vehicle trips. The proposed project’s annual gasoline consumption would be approximately 44,972 gallons, which represents 0.001 percent of Los Angeles County’s 2019 consumption of 3.6 billion gallons (CEC 2019). The proposed project’s annual diesel consumption would be approximately 4,509 gallons, which represents 0.001 percent of Los Angeles County’s 2019 consumption of 584.7 million gallons (CEC 2019).

The project site is two vacant parcels that consist of approximately 2.8 acres located to the east of Interstate (I)-405 interchange with East Carson Street. The project site is located adjacent to a variety of existing transportation facilities. The proposed project does not propose to change any roadway classifications or established truck routes. The project site is served by one public transit route, Long Beach Transit Route 4, which provides connections to the Los Angeles Metropolitan Transportation Authority (Metro) J Line bus rapid transit at Carson Station and the Metro A Line light rail at Del Amo Station. Implementation of the proposed project would not remove or impede access to existing bicycle facilities, sidewalks, or transit services adjacent to the project site, nor would it affect future planned bicycle facility improvements along other nearby roadways or the Dominguez Channel.

Based on the proposed project characteristics, it is classified as local-serving retail pursuant to the Technical Advisory on Evaluating Transportation Impacts in CEQA (Office of Planning and Research 2018). As described in the Technical Advisory, “By adding retail opportunities into the urban fabric and thereby improving retail destination proximity, local-serving retail development tends to shorten trips and reduce VMT.” Based on the above, operation of the proposed project would not result in the wasteful, inefficient, and unnecessary consumption of transportation fuel, and impacts would be less than significant.

b) The proposed project would use construction contractors who demonstrate compliance with applicable regulations. Construction equipment would comply with federal, State, and regional requirements where applicable. With respect to truck fleet operators, the USEPA and NHSTA have adopted fuel efficiency standards for medium- and heavy-duty trucks. The Phase 1 heavy-duty truck standards apply to combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles for model years 2014 through 2018 and result in a reduction in fuel consumption from 6 to 23 percent over the 2010 baseline, depending on the vehicle type (USEPA 2011). USEPA and NHTSA also adopted the Phase 2 heavy-duty truck standards, which cover model years 2021 through 2027 and require the phase-in of a 5 to 25 percent reduction in fuel consumption over the 2017 baseline depending on the compliance year and vehicle type (USEPA 2016). The energy modeling for trucks does not take into account specific fuel reductions from these regulations, since they would apply to fleets as they incorporate newer trucks meeting the regulatory standards; however, these regulations would have an overall beneficial effect on reducing fuel consumption from trucks over time as older trucks are replaced with newer models that meet the standards.

In addition, construction equipment and trucks are required to comply with CARB regulations regarding heavy-duty truck idling limits of 5 minutes at a location and the phase-in of off-road emission standards that result in an increase in energy savings in the form of reduced fuel consumption from more fuel-efficient engines. Although these regulations are intended to reduce criteria pollutant emissions, compliance with the anti-idling and emissions regulations would also result in the efficient use of construction-related energy.

The State and the City have implemented energy policies relevant to the proposed project. The California Renewables Portfolio Standard (RPS) was established in 2002 and required retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2013. Senate Bill (SB) 350 (Chapter 547, Statues of 2015) is the most recent update to the State’s RPS requirements. The RPS requires publicly owned utilities and retail sellers of electricity in California to procure 33 percent of their electricity sales from eligible renewable sources by 2020 and 50 percent by the end of 2030. The proposed project would comply with the applicable provisions of the 2019 Title 24 standards and the CALGreen Code in effect at the time of building permit issuance. As of February 2019, the City receives electricity from Clean Power Alliance (CPA) and is enrolled in their 50 percent renewable electricity option. Customers have the choice to opt for a lower renewable energy mix (36 percent), opt for a higher renewable energy mix (100 percent), or opt out and receive electricity from SCE (CPA 2018). The energy analysis conservatively assumes the proposed project would remain with SCE as their electricity provider and does not take additional credit for renewable energy beyond the expected SCE renewable energy percentage for year 2024 based on the required renewables by year 2024 under SB 100.[[5]](#footnote-6) Therefore, the electricity provided to the City meets or exceeds RPS requirements depending on what rate option is chosen by individual customers.

As discussed above, the proposed project would comply with the applicable provisions of 2019 Title 24 Standards, City of Carson’s EECAP, and the CALGreen Code in effect at the time of building occupancy. As such, the proposed project would minimize energy demand. Further, as discussed in Section III, Air Quality, of this IS/MND, SCAG predicted Carson’s employment growth between 2012 and 2040 to be approximately 11,200 new jobs (SCAG 2020). The estimated five or six new employees generated by the proposed project would be well within SCAG’s employment growth assumptions for Carson. As discussed in Section XVII, Transportation, of this IS/MND, the proposed project would not have a significant impact on transportation in the project vicinity. Additionally, the project site is located in a neighborhood characterized by a mix of residential and commercial uses. The proposed project is consistent with SCAG growth projections and would comply with State and local regulations to reduce energy consumption, the proposed project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency and impacts would be less than significant.

#### VII. Geology and Soils

| ***Issues (and Supporting Information Sources)*** | ***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.) |  |  |  |  |
| ii) Strong seismic ground shaking? |  |  |  |  |
| iii) Seismic-related ground failure, including liquefaction? |  |  |  |  |
| iv) Landslides? |  |  |  |  |
| b) Result in substantial soil erosion or the loss of topsoil? |  |  |  |  |
| 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? |  |  |  |  |
| 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? |  |  |  |  |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? |  |  |  |  |
| f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? |  |  |  |  |

This section is based in part on the Geotechnical Investigation, Proposed Commercial Development 21611 South Perry Street, Carson, California, APN: 7327-010-014 (Geotechnical Investigation), prepared by Geocon West, Inc., dated April 23, 2021 (refer to **Appendix E** of this IS/MND). Additionally, this section is based on the Paleontological Resources Assessment Report, prepared by ESA, dated January 2022 (refer to **Appendix F** of this IS/MND). Appendix F is confidential and not for public distribution.

##### Discussion

a.i) The project site is located in the seismically active Southern California Region; however, it is not within an Alquist-Priolo Zone. The City’s General Plan Regional Fault Map indicates that the project site is within the Avalon-Compton fault zone, which is part of the larger Newport Inglewood fault zone (City of Carson 2004). The Avalon-Compton fault zone is located approximately 2.69 miles north of the project site; however, as stated in the City’s General Plan and the California Geological Survey (CGS 2021), surface faulting is not considered a significant potential hazard for properties located within the City.

Furthermore, the proposed project’s building design and construction would be required to conform to the current seismic design provisions of the City’s Building Code, which incorporates relevant provisions of the 2019 California Building Code (CBC). The 2019 CBC, as amended by the City’s Building Code, incorporates the latest seismic design standards for structural loads and materials to provide for the latest in earthquake safety. With adherence to the latest CBC, the latest California seismic design requirements would be included in the proposed project’s building design and inspected by the City during construction; therefore, impacts would be less than significant.

a.ii) The entire Southern California region including the project site, is susceptible to strong ground shaking from severe earthquakes. The level of ground shaking that would be experienced at the project site from active or potentially active faults or blind thrust faults in the region would be a function of several factors including earthquake magnitude, type of faulting, rupture propagation path, distance from the epicenter, earthquake depth, duration of shaking, site topography, and site geology. As discussed above, the building design would be reviewed and approved by the City’s building inspectors before construction permits are issued to ensure the proposed project is constructed in accordance with the CBC, and thereby the City’s Building Code, which includes requirements for structures that reduce the potential for exposure of people or structures to seismic risks to the maximum extent possible. Therefore, a less-than-significant impact associated with strong seismic ground shaking would occur.

a.iii) Liquefaction is a seismic phenomenon in which loose, saturated, granular soils behave similarly to a fluid when subject to high-intensity ground shaking. Specifically, liquefaction occurs when the shock waves from an earthquake of sufficient magnitude and duration compact and decrease the volume of the soil; if drainage cannot occur, this reduction in soil volume will increase the pressure exerted on the water contained in the soil, forcing it upward to the ground surface. This process can transform stable soil material into a fluid-like state. This fluid-like state can result in horizontal and vertical movements of soils and building foundations from lateral spreading of liquefied materials and post-earthquake settlement of liquefied materials. Liquefaction occurs when three general conditions exist: (1) shallow groundwater; (2) low-density non-cohesive (granular) soils; and (3) high-intensity ground motion.

A review of the State of California Seismic Hazard Zone Map for the Torrance Quadrangle (CDMG 1999) indicates that the project site is located in an area designated as having a potential for liquefaction. Furthermore, the City of Carson (City of Carson 2002) indicates the project site is located within an area that has a potential for liquefaction. The Geotechnical Investigation prepared for the proposed project performed a liquefaction analysis. The analysis indicates that the alluvial soils could be susceptible to the liquefaction induced settlements. The foundation design recommendations that would be implemented based on a Final Geotechnical Report would minimize the effects of settlement from liquefaction. In addition, the proposed project would be constructed in accordance with the CBC, and thereby the City’s Building Code, which includes requirements for structures that reduce the potential for exposure of people or structures to seismic risks to the maximum extent possible, including liquefaction. As such, the proposed project would not expose additional people or structures to potential substantial adverse effects associated with liquefaction. Therefore, a less-than-significant impact associated with liquefaction would occur.

a.iv) Due to the relatively flat topography of the project site and surrounding area, the project site would not expose people or structures to potential landslides. Furthermore, the proposed project would be constructed in accordance with the CBC, and thereby the City’s Building Code. As such, no impacts would occur regarding the potential for landslides.

b) The project site is currently undeveloped with exposed soil. Under the proposed project, the project site would drain from east to west via gutters that wrap around the proposed buildings. The runoff generated would be treated by a 10-foot by 20-foot Modular Wetland System that would discharge via an 18-inch pipe to the existing 5-foot storm drain inlet and ultimately the Dominguez Channel. During project operation, the project site would be fully developed with buildings and landscaping and would not contain exposed soils. As the proposed project would disturb more than 1 acre of soil, the proposed project would be subject to the requirements of the National Pollution Elimination Discharge System (NPDES), which would require preparation of a Stormwater Pollution Prevention Plan (SWPPP) for approval by the Los Angeles Regional Water Quality Control Board prior to construction. The SWPPP would identify best management practices (BMPs) to be implemented with the proposed project in order to prevent erosion, minimize siltation impacts, and protect water quality. In addition, the proposed project would also be subject to CMC Chapter 8, which contains the City’s Stormwater Management and Discharge Control Ordinance. This ordinance is the City’s tool to ensure the future health, safety, and general welfare of the citizens of the City and the water quality of the receiving waters of the County of Los Angeles and surrounding coastal areas. Therefore, with implementation of the NPDES and CMC requirements, soil erosion or loss of topsoil impacts would be less than significant.

c) The project site currently contains no existing buildings in a fully urbanized area with relatively flat topography. As discussed previously, the project site is relatively flat and is not located within an area susceptible to landslides.

With regard to liquefaction, while the project site is located within an area that has a potential for liquefaction, the proposed project’s building foundation would be designed to minimize the effects of settlement from liquefaction. In addition, the proposed project would be constructed in accordance with the CBC, and thereby the City’s Building Code, which includes requirements for structures that reduce the potential for exposure of people or structures to seismic risks to the maximum extent possible, including liquefaction.

With regard to lateral spreading, the Geotechnical Investigation performed an analysis for lateral spreading that indicated that up to 10 inches of lateral displacement toward the Dominguez Channel could occur. As with liquefaction, the grading and foundation design as well as implementation of the City’s Building Code, would minimize the effects of lateral spreading.

With regard to subsidence, the project site is not located within an area of known ground subsidence and no large-sale extraction of groundwater, gas, oil, or geothermal energy that would result in subsidence would occur. As such, there is no potential for subsidence on the project site.

Soil collapse is a phenomenon where the soils undergo a significant decrease in volume upon increase in moisture content, with or without an increase in external loads. The Geotechnical Investigation indicates that the upper alluvial soils that underlie the project site are relatively soft and compressible, potentially leading to collapse. As with liquefaction and lateral spreading, the foundation design recommendations as well as implementation of the City’s Building Code, would minimize the effects of collapse. As such, conformance with standard engineering practices and design criteria would ensure that the proposed project does not exacerbate existing conditions. Therefore, impacts related to geologic unit or soil that is unstable are less than significant.

d) Expansive soils are typically associated with fine-grained clayey soils that have the potential to shrink and swell with repeated cycles of wetting and drying. Such soils can expose overlying buildings to differential settlement and other structural damage. According to the Geotechnical Investigation, the upper 5 feet of existing soils encountered during the site investigation performed for the Geotechnical Investigation are considered to have a “medium” expansive potential and are classified as “expansive” in accordance with the CBC. The Geotechnical Investigation provides recommendations for the building foundations and slabs that would minimize impacts from expansive soils. Conformance with standard engineering practices and design criteria as recommended in the Final Geotechnical Report, as well as with the CBC, and thereby the City’s Building Code, would reduce the potential for substantial risks to life or property as a result of expansive soils to a minimal level and the associated impacts would be less than significant.

e) The project site is located in an urbanized area and is served by community water and sewer service. Furthermore, no septic tanks or alternative wastewater disposal systems are in use or would be required under the proposed project. Therefore, no impact would occur.

f) A review of geologic mapping indicates the entire project lies upon young Quaternary alluvium composed of fine sand and loamy clays. A geotechnical study prepared for the proposed project identified two subsurface sediments within the project site including: (1) artificial fill extending from the surface to 3 to 9 feet deep; and (2) Holocene alluvium consisting of light brown to brown, olive brown, or gray to dark gray interbedded clay, sandy clay, silt, sandy silt, silty sand and clayey underlying the artificial fill to a depth of 51 feet. A database search from the Natural History Museum of Los Angeles County (LACM) identified no fossil localities within the project site or its immediate vicinity.

Project ground disturbing activities would extend to a depth of 6 feet below the ground surface and are unlikely to disturb sediments containing significant paleontological resources. The geologic map and literature review indicates the project site is underlain by artificial fill to a depth of 3–6 feet and Holocene-age alluvial deposits to a depth of 51 feet. These two geologic units have no and low potential to contain intact paleontological resources, respectively. Given the shallow depth of proposed project excavation, coupled with low paleontological sensitivity of the geologic units within the project site, project implementation is unlikely to impact significant paleontological resources or unique geologic resources. Therefore, no impact would occur and no mitigation measures regarding paleontological resources are needed.

#### VIII. Greenhouse Gas Emissions

| ***Issues (and Supporting Information Sources)*** | ***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? |  |  |  |  |
| b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? |  |  |  |  |

##### Discussion

a,b) Gases that trap heat in the atmosphere are called greenhouse gases (GHGs). The major concern with GHGs is that increases in their concentrations are causing global climate change. Global climate change is a change in the average weather on Earth that can be measured by wind patterns, storms, precipitation, and temperature. Although there is disagreement as to the rate of global climate change and the extent of the impacts attributable to human activities, most in the scientific community agree that there is a direct link between increased emissions of GHGs and long-term global temperature increases.

The State of California defines GHGs as carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), sulfur hexafluoride (SF6), perfluorocarbons (PFCs), and hydrofluorocarbons (HFCs). Because different GHGs have different global warming potentials (GWPs) and CO2 is the most common reference gas for climate change, GHG emissions are often quantified and reported as CO2 equivalents (CO2e). For example, CH4 has a GWP of 25 (over a 100-year period); therefore, 1 metric ton (MT) of CH4 is equivalent to 25 MT of CO2 equivalents (MTCO2e). The State uses the GWP ratios available from the United Nations Intergovernmental Panel on Climate Change (IPCC) and published in the Fourth Assessment Report (AR4). By applying the GWP ratios, project-related CO2e emissions can be tabulated in metric tons (MT) per year. Large emission sources are reported in million metric tons (MMT) of CO2e.[[6]](#footnote-7)

Some of the potential effects of global warming in California may include loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more forest fires, and more drought years (CARB 2008). Globally, climate change has the potential to impact numerous environmental resources through potential, though uncertain, impacts related to future air temperatures and precipitation patterns. The projected effects of global warming on weather and climate are likely to vary regionally, but are expected to include the following direct effects (IPCC 2001):

* Higher maximum temperatures and more hot days over nearly all land areas
* Higher minimum temperatures, fewer cold days and frost days over nearly all land areas
* Reduced diurnal temperature range over most land areas
* Increase of heat index over land areas
* More intense precipitation events

Also, there are many secondary effects that are projected to result from global warming, including global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity. While the possible outcomes and the feedback mechanisms involved are not fully understood and much research remains to be done, the potential for substantial environmental, social, and economic consequences over the long term may be great.

California generated 418.2 MMTCO2e in 2019, the latest year for which data are available from CARB (CARB 2021a). Combustion of fossil fuel in the transportation sector was the single largest source of California’s GHG emissions in 2019, accounting for almost 40 percent of total GHG emissions in the State. This sector was followed by the electric power sector (14 percent) and the residential emissions (7 percent) (CARB 2021a).

Impacts of GHGs are borne globally, as opposed to localized air quality effects of criteria air pollutants and toxic air contaminants. The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; however, it is clear that the quantity is enormous, and no single project would measurably contribute to a noticeable incremental change in the global average temperature, or to global, local, or micro climates. From the standpoint of CEQA, GHG impacts to global climate change are inherently cumulative.

The City of Carson has not adopted a threshold of significance for GHG emissions that would be applicable to this project. In December 2008, the SCAQMD adopted a 10,000 MTCO2e per year significance threshold for industrial facilities for projects in which the SCAQMD is the lead agency. SCAQMD has not formally adopted a significance threshold for GHG emissions generated by a project for which SCAQMD is not the lead agency, nor a uniform methodology for analyzing impacts related to GHG emissions on global climate change. In the absence of any applicable adopted or accepted numerical threshold of significance for GHG emissions, the methodology for evaluating the proposed project’s impacts related to GHG emissions focuses on its consistency with State, regional, and local plans adopted for the purpose of reducing and/or mitigating GHG emissions. This evaluation of consistency with such plans is the sole basis for determining the significance of the proposed project’s GHG-related impacts on the environment. Notwithstanding, for informational purposes, the analysis also calculates the amount of GHG emissions that would be attributable to the proposed project using recommended air quality models, as described below. The primary purpose of quantifying the proposed project’s GHG emissions is to satisfy CEQA Guidelines Section 15064.4(a), which calls for a good-faith effort to describe and calculate emissions. However, the significance of the proposed project’s GHG emissions impacts is not based on the amount of GHG emissions resulting from the proposed project. Consistent with SCAQMD guidance, total emissions from construction are amortized over an assumed project lifetime of 30 years and added to operational emissions (SCAQMD 2008).

CEQA Guidelines 15064.4 (b)(1) states that a lead agency may use a model or methodology to quantify GHGs associated with a project. In June 2021, the SCAQMD in conjunction with CAPCOA released the latest version of the CalEEMod (Version 2020.4.0). The purpose of this model is to estimate construction-source and operational-source emissions from direct and indirect sources. Accordingly, the latest version of CalEEMod has been used for this proposed project to estimate the proposed project’s emissions. Construction and operations mobile emissions were estimated outside of CalEEMod to account for EMFAC2021 because EMFAC2021 has not yet been incorporated in the current version of CalEEMod (refer to **Appendix G** of this IS/MND for additional details).

###### Construction Emissions

Construction activities associated with the proposed project would result in emissions of CO2 and, to a lesser extent, CH4 and N2O. Construction-period GHG emissions were quantified based on the same construction schedule and activities as described above in Section III (b). To amortize the emissions over the life of a project, the SCAQMD recommends calculating the total GHG emissions attributable to construction activities, dividing it by a 30-year project life, and then adding that number to a project’s annual operational-phase GHG emissions. As such, construction emissions were amortized over a 30-year period and included in the proposed project’s annual operational-phase GHG emissions.

###### Operational Emissions

GHG Emissions

Operational activities associated with the proposed project would result in emissions of CO2 and, to a lesser extent CH4 and N2O. Operational sources of GHG emissions would include mobile sources from vehicles traveling to and from the site, and indirect GHG emissions from export of electricity, water consumption, and waste generation.

A maximum of 580 trips per day are expected (Fehr & Peers 2022). GHG emissions from mobile sources are based on the vehicle emission factors from EMFAC2021 and the default trip length and trip distribution values for the project land uses in CalEEMod, which are Air District-wide average trip distance and trip distribution values. Daily trip generation from the proposed project’s LTA, provided in **Appendix L** of this IS/MND, were used to estimate the total VMT for the project trips (Fehr & Peers 2022).

Emissions of GHGs also resulted from the consumption of fossil fuels to generate electricity and to provide heating and hot water to the project site. The project electricity demands are supplied by SCE, which indicates their renewable power accounted for 30.9 percent in 2020.

GHG emissions from solid waste disposal are also calculated using CalEEMod. Emissions are based on solid waste calculated for the proposed project and the GHG emission factors for solid waste decomposition. The GHG emission factors, particularly for CH4, depend on characteristics of the landfill, such as the presence of a landfill gas capture system and subsequent flaring or energy recovery. The default values, as provided in CalEEMod, for landfill gas capture (e.g., no capture, flaring, energy recovery) are statewide averages and are used in this assessment.

###### Emissions Summary

The proposed project’s annual GHG emissions are shown in Table 8, Annual Project Greenhouse Gas Emissions. As shown, the proposed project’s total GHG emissions would be 876 MTCO2e. GHG emission calculations are provided in **Appendix G** of this IS/MND.

| Table 8  Annual Project Greenhouse Gas Emissions | |
| --- | --- |
| Emissions Sources | CO2e (Metric Tons per Year)a |
| Area | <1 |
| Energy (Electricity, Natural Gas) | 77 |
| Mobile | 640 |
| EV Charging | 1 |
| Waste | 62 |
| Water | 69 |
| Constructionb | 27 |
| Project Total GHG Emissions | 876 |
| NOTES:  a Totals may not add up exactly due to rounding in the modeling calculations. Refer to **Appendix G** of this IS/MND for details.  b Construction emissions are amortized over 30 years.  SOURCE: ESA 2022 | |

The City of Carson General Plan does not identify specific GHG or climate change policies or goals. In the absence of any adopted, quantitative threshold, the proposed project would not have a significant effect on the environment if the proposed project is found to be consistent with the applicable regulatory plans and policies to reduce GHG emissions, including CARB’s 2017 Climate Scoping Plan, SCAG’s 2020–2045 RTP/SCS, and the City’s Energy Efficiency Climate Action Plans (EECAP).

The EECAP, developed by the South Bay Cities Council of Governments, aims to implement energy efficiency and GHG reduction efforts (City of Carson 2015). The proposed project has been evaluated for consistency with the EECAP. According to the EECAP, the City is in the process of implementing strategies to reduce energy consumption across sections, which includes promoting commercial energy retrofits (City of Carson 2015). Consistent with the strategies identified in the EECAP, the proposed project would install lighting and a ventilation system that conforms to the California Green Building Code and include approximately 12,134 square feet of landscaping around the perimeter of the project site. Therefore, the proposed project would be consistent with the applicable GHG reduction strategies in the City’s EECAP.

As shown in Table 8 above, the proposed project’s highest GHG contributors are from mobile and energy sources. These are highly regulated sources with measures implemented in CARB’s 2017 Climate Scoping Plan to reduce GHG emissions from each sector. With respect to relevant statewide GHG reduction strategies, in January 2007, the California Governor enacted Executive Order S-01-07, which mandates the following: (1) establish a statewide goal to reduce the carbon intensity of California’s transportation fuels by at least 10 percent by 2020; and (2) adopt a Low Carbon Fuel Standard (LCFS) for transportation fuels in California. CARB identified the LCFS as one of the nine discrete early actions in the Climate Change Scoping Plan. The LCFS regulations were approved by CARB in 2009 and established a reduction in the carbon intensity of transportation fuels by 10 percent by 2020 with implementation beginning on January 1, 2011. In September 2015, CARB approved the re-adoption of the LCFS, which became effective on January 1, 2016, to address procedural deficiencies in the way the original regulation was adopted. In the proposed 2017 Climate Change Scoping Plan Update, CARB’s preferred recommendation includes increasing the stringency of the LCFS by reducing the carbon intensity of transportation fuels by 18 percent by 2030, up from the current target of 10 percent by 2020 (CARB 2017). In April 2017, the LCFS was brought before the Court of Appeal challenging the analysis of potential nitrogen dioxide impacts from biodiesel fuels. The Court directed CARB to conduct an analysis of nitrogen dioxide impacts from biodiesel fuels and froze the carbon intensity targets for diesel and biodiesel fuel provisions at 2017 levels until CARB has completed this analysis. On March 6, 2018, CARB issued its Draft Supplemental Disclosure Discussion of Oxides of Nitrogen Potentially Caused by the Low Carbon Fuel Standard Regulation (CARB 2021a). CARB posted modifications to the amendments on August 13, 2018, with a public comment period through August 30, 2018. Final approval of regulatory changes from CARB’s analysis of nitrogen dioxide impacts from biodiesel fuels was made on January 4, 2019 (CARB 2021b). The LCFS was amended in September 2018 to require a reduction of at least 7.5 percent in the carbon intensity of California’s transportation fuels by 2020 and a 20 percent reduction in carbon intensity from a 2010 baseline by 2030 (CARB 2021c). The 2017 Climate Change Scoping Plan also calls for increasing the mandatory reduction in carbon intensity of transportation fuels from 10 percent to 18 percent by 2030.

As previously stated, the RPS requires publicly owned utilities and retail sellers of electricity in California to procure 33 percent of their electricity sales from eligible renewable sources by 2020 and 50 percent by the end of 2030. SCE, the utility provider for the project site, reported 30.9 percent of their power from renewable sources (SCE 2020). Therefore, GHG emissions from electricity consumption would decrease in future years.

Additionally, SCAG Regional Council adopted the 2020–2045 RTP/SCS on September 3, 2020. The 2020–2045 RTP/SCS includes “more compact, infill, walkable and mixed-use development strategies to accommodate new region’s growth would be encouraged to accommodate increases in population, households, employment, and travel demand.” Moreover, the 2020–2045 RTP/SCS states the focus would be “growth in existing urban regions and opportunity areas, where transit and infrastructure are already in place. Locating new growth near bikeways, greenways, and transit would increase active transportation options and the use of other transit modes, thereby reducing number of vehicle trips and trip lengths and associated emissions.”

The proposed project would not conflict with the 2020–2045 RTP/SCS goals and benefits intended to improve mobility and access to diverse destinations, provide better “placemaking,” provide more transportation choices, and reduce vehicular demand and associated emissions. Therefore, the proposed project would not conflict with the GHG reduction-related actions and strategies contained in the 2020–2045 RTP/SCS.

The project site is located in a neighborhood characterized by a mix of residential and commercial uses. As previously stated, the project site is a proposed self‐storage facility with ancillary office and retail uses (likely a mail service store such as a UPS or FedEx). These uses would support measures related to reducing vehicle trips by locating additional retail uses near existing residents and commercial uses.

Overall, the proposed project would not conflict with CARB’s implementation of the LCFS or use of renewable energy sources, the City’s EECAP, and it would not conflict with SCAG’s 2020–2045 RTP/SCS. Therefore, the proposed project would not conflict with an applicable plan, policy, or regulation to reduce GHG emissions. As such, impacts would be less than significant.

#### IX. Hazards and Hazardous Materials

| ***Issues (and Supporting Information Sources)*** | ***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? |  |  |  |  |
| 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? |  |  |  |  |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? |  |  |  |  |
| 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? |  |  |  |  |
| 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? |  |  |  |  |
| f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? |  |  |  |  |
| g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires? |  |  |  |  |

This section is based in part on the Phase I Environmental Site Assessment (Phase I ESA), prepared by Weis Environmental, dated January 25, 2021 (refer to **Appendix H** of this IS/MND).

As discussed above, there are known groundwater impacts at the project site. As such, 16 groundwater monitoring wells were installed on the project site and are used as part of the groundwater monitoring program. The Phase I ESA notes that concentrations in existing monitoring wells generally appeared to be stable or decreasing, with a few instances of fluctuation. As it relates to soil impacts, a Soil Excavation Workplan was developed by URS and 7,255.69 tons (approximately 4,837 in-place cubic yards assuming 1.5 tons per cubic yard) of impacted soil were excavated from the project site and disposed off-site. The impacted soil was removed from four distinct areas to depths ranging from approximately 5 to 8 feet. URS concluded that based on confirmation soil sampling for each of the excavations, the cleanup criteria set out in the workplan had been met. URS also stated that a SMP for the project site was prepared to mitigate potential future exposure to residual petroleum hydrocarbons and odor generation during project site development. URS requested that the LARWQCB issue a no further action letter for vadose zone soils at the project site. The LARWQCB reviewed the report and concurred with its findings. A no further action letter for soil was issued by the LARWQCB on December 14, 2015.

With the exception of the known residual petroleum hydrocarbon impacts in soil beneath the project site (below commercial/industrial screening levels) and the known groundwater impacts that have resulted from off-site sources, the Phase I ESA did not identify features and/or conditions indicating the presence or likely presence of hazardous substances and/or petroleum products at the project site.

##### Discussion

a) Exposure of the public or the environment to hazardous materials can occur through transportation accidents; environmentally unsound disposal methods; improper handling of hazardous materials or hazardous wastes (particularly by untrained personnel) during construction or operation. The severity of these potential effects varies by type of activity, concentration and/or type of hazardous materials or wastes, and proximity to sensitive receptors.

###### Construction

The project site is located in an urbanized area of the City of Carson, on two parcels, which are currently vacant and undeveloped. Project construction activities would involve minimal use and transport of hazardous materials. Construction would involve the use of some heavy equipment, which use small amounts of oil and fuels. Construction activities that involve hazardous materials are governed by several agencies, including the Environmental Protection Agency (EPA), Caltrans, California Division of Occupational Safety and Health (Cal/OSHA), and the California Department of Toxic Substances Control (DTSC). As required by these regulatory agencies, construction contractors would be required to implement BMPs for handling hazardous materials during construction activities, including following manufacturers’ recommendations and regulatory requirements for use, storage, and disposal of chemical products and hazardous materials used in construction; avoiding overtopping construction equipment fuel tanks; routine maintenance of construction equipment; and properly disposing of discarded containers of fuels and other chemicals. Construction contractors are required to implement safety measures in accordance with the General Industry Safety Orders of the California Code of Regulations. Therefore, all construction-related hazardous materials would be transported and disposed of in accordance with applicable codes and regulations. Compliance with applicable federal, State, and local standards is required; therefore, construction-related impacts in regards to the transport, use, or disposal of hazardous materials during construction are less than significant.

###### Operation

The proposed project would operate as a self-storage facility with ancillary office and retail uses and associated landscaping and facility maintenance. None of the proposed land uses are typically considered a source of hazardous materials. Hazardous materials would be limited to private use of commercially available cleaning products, landscaping chemicals and fertilizers, and various other commercially available substances. In addition, operation of the proposed project would be required to adhere to the environmental covenant recorded against the project site, which requires a vapor barrier to be incorporated in the design of proposed buildings. Furthermore, all future project tenants would be required to sign a rental agreement that prohibits the storage of hazardous materials and chemicals. Therefore, operational impacts associated with the proposed project related to use, transport, storage, or disposal of hazardous materials would be less than significant.

b) Construction

Construction of the proposed project would require minimal use of hazardous materials typical to construction, including gasoline, motor oils, paints, solvents, and other miscellaneous materials (e.g., engine oil, etc.). All potentially hazardous materials would be used and stored in accordance with manufacturers’ instructions and handled in compliance with applicable standards and regulations. The construction phase would involve the use of heavy equipment, which require small amounts of oil and fuels and other potential flammable substances. During construction, equipment would require refueling and minor maintenance on location that could lead to fuel and oil spills. The contractor would be required to identify a staging area for storing materials. Additionally, operators of heavy-duty equipment are required to remain alert, and nearby during fueling of equipment and spills, should they occur, so their spills do not reach the off-site environment. Construction contractors would be required to implement safety measures in accordance with the General Industry Safety Orders of the California Code of Regulations. All construction-related materials would be transported and disposed of in accordance with applicable codes and regulations. Compliance with applicable federal, State, and local standards is required.

As it relates to the petroleum hydrocarbon-impacted soil identified at the project site, impacted soil was removed from the project site and subsequently LARWQCB issued a no further action letter for vadose zone soils at the project site. In addition, as it relates to the petroleum hydrocarbon-impacted groundwater, as noted above, concentrations in existing monitoring wells generally appeared to be stable or decreasing, with a few instances of fluctuation. While the proposed project would excavate the upper 6 feet of existing earth materials, the soils encountered during excavation would be the clean import soils that was backfilled as part of the remediation on the project site. Furthermore, as groundwater was encountered at depths of 12.5 and 17.6 feet beneath the existing ground surface, proposed excavation would not impact the petroleum hydrocarbon-impacted groundwater. Construction would be required to adhere to the SMP and environmental covenant recorded against the site. As such, construction activities would not result in accidental conditions involving existing on-site contamination.

Based on the above, construction-related impacts in regards to significant risk of upset or accidental release of hazardous materials would be less than significant.

###### Operation

As discussed above, hazardous materials used during operation would be limited to private use of commercially available cleaning products, landscaping chemicals and fertilizers, and various other commercially available substances.

As it relates to the petroleum hydrocarbon-impacted soil identified at the project site, impacted soil was removed from the project site and subsequently LARWQCB issued a no further action letter for vadose zone soils at the project site. In addition, as it relates to the petroleum hydrocarbon-impacted groundwater, as noted above, concentrations in existing monitoring wells generally appeared to be stable or decreasing, with a few instances of fluctuation. Operation of the proposed project would be required to adhere to the environmental covenant recorded against the site, which requires a vapor barrier to be incorporated in the design of future structures. Furthermore, all future storage tenants would be required to sign a rental agreement that prohibits the storage of hazardous materials and chemicals. As such, project operation would not result in upset or accident conditions involving existing on-site contamination. Based on the above, impacts in regards to significant risk of upset or accidental release of hazardous materials during operation of the proposed project would be less than significant.

c) The nearest school to the project site is the Carnegie Middle School, located approximately 0.37 miles southwest. As such, the project site and would not be within 0.25 miles of a school. Therefore, no impacts to existing schools would occur.

d) Based on a review of the databases, as provided in the Phase I ESA, the project site was identified in the RCRA SQG, CLEANUP SITES and DEED State regulatory databases. The project site is referenced with a closed regulatory status as of October 23, 2015, and with a Covenant and Environmental Restriction recorded on the project site. The project site is also listed on the local LA County CUPA and LA HMS regulatory databases. No details are provided in the LA County CUPA database listing. The LA HMA database listing pertains to closed permits pertaining to waste generation and stormwater. In addition, the project site is listed on the non-ASTM FINDS/FRS, HAZNET and HIST MANIFEST regulatory databases. The listings pertain to the manifesting and removal of various wastes. As discussed above, contaminated soils were removed and LARWQCB issued a no further action letter for vadose zone soils at the project site. In addition, as it relates to the petroleum hydrocarbon-impacted groundwater, as noted above, concentrations in existing monitoring wells generally appeared to be stable or decreasing, with a few instances of fluctuation. The site is also subject to a SMP and environmental deed restriction. Furthermore, groundwater monitoring would continue during operation of the proposed project. Therefore, the proposed project would not create a significant hazard to the public or the environment, and impacts would be less than significant.

e) The project site is approximately 3.3 miles from the Compton/Woodley Airport, 4 miles from Long Beach International Airport and Torrance/Zamperini Field.. Based on the Los Angeles County Airport Land Use Plan, the project site is located outside of the Airport Influence Area for the Compton/Woodley Airport and the Long Beach International Airport and Torrance/Zamperini Field (Los Angeles County Airport Land Use Commission 2004). Therefore, the proposed project would not pose any airport safety hazards for people residing or working in the project area, and no impacts would occur.

f) The City has prepared a Multi-Hazard Functional Plan (1996) for emergency response within the City (City of Carson 2004). The plan identifies emergency protocol, critical meeting areas, and emergency evacuation routes. The four major freeways (I-405, State Route [SR]‑91, I‑110, and I‑710) as well as arterial streets with right-of-way widths from 80 to 100 feet at 0.5-mile intervals would serve as potential evacuation routes during a disaster. Potential evacuation routes that occur near the project site include Carson Street, Wilmington Street, Avalon Boulevard, and 223rd Street. While primary access to the project site would be provided from South Perry Street, vehicles travelling to the project site during construction or operation would do so via East Carson Street. During construction, East Carson Street may require temporary partial lane closures. The Applicant would be required to implement a traffic management plan that would ensure that at least one lane remains open and emergency access is maintained during construction. In addition, the vehicle trips generated is not anticipated to impact emergency access provided from East Carson Street and operations are not likely to interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, impacts regarding impairing an emergency response or evacuation plan would be less than significant.

g) The project site is located in an urbanized area and would continue to be served by the Los Angeles County Fire Department (LACFD). According to the California Department of Forestry and Fire Protection (CAL FIRE), the proposed project is not located within a Very High Fire Hazard Severity Zone (CAL FIRE 2022). Construction of the proposed project would be in accordance with the 2019 CBC, 2019 California Fire Code (CFC), which include mandatory measures for fire prevention and emergency access. Therefore, the proposed project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires, and no impacts would occur.

#### X. Hydrology and Water Quality

| ***Issues (and Supporting Information Sources)*** | ***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 ground water quality? |  |  |  |  |
| b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? |  |  |  |  |
| 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 imperious surfaces, in a manner which would: |  |  |  |  |
| i) result in substantial erosion or siltation on- or off-site; |  |  |  |  |
| ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; |  |  |  |  |
| iii) create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or |  |  |  |  |
| iv) impede or redirect flood flows? |  |  |  |  |
| d) In flood hazard, tsunami, or seiche zones, risk or release of pollutants due to project inundation? |  |  |  |  |
| e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? |  |  |  |  |

This section is based in part on the Carson Self-Storage Preliminary Utilities Technical Memorandum (Utilities Memorandum), prepared by Omega Engineering Consultants, dated March 9, 2022 (refer to **Appendix I** of this IS/MND) and Low Impact Development Plan (LID Plan), also prepared by Omega Engineering Consultants, dated October 5, 2021 (refer to **Appendix J** of this IS/MND).

##### Discussion

a) The project site is located in an urbanized area of the City of Carson and is currently two vacant undeveloped parcels. As part of Clean Water Act Section 402, the Environmental Protection Agency has established regulations under the NPDES program to control direct stormwater discharges. In California, the State Water Regional Control Board (SWRCB) administers the NPDES permitting program and is responsible for developing NPDES permitting requirements. The NPDES program regulates industrial pollutant discharges, which include construction activities. The SWRCB works in coordination with the nine Regional Water Quality Control Boards (RWQCBs) to preserve, protect, enhance, and restore water quality. The project site is within the jurisdiction of the Los Angeles RWQCB. Impacts related to water quality typically range over three different periods: (1) during the earthwork and construction phase, when the potential for erosion, siltation, and sedimentation would be the greatest; (2) following construction, prior to the establishment of ground cover, when the erosion potential may remain relatively high; and (3) following completion of a project, when impacts related to sedimentation would decrease markedly, but those associated with urban runoff would increase.

###### Construction

Project construction could result in short-term impacts to water quality due to the handling, storage, and disposal of construction materials, maintenance and operation of construction equipment, and earthmoving activities. Potential pollutants associated with these activities could damage downstream waterbodies. Dischargers whose projects disturb 1 acre or more of soil or whose projects disturb less than 1 acre but are part of a larger common plan of development that in total disturbs 1 acre or more, are required to obtain coverage under the SWRCB’s General Permit for Discharges of Stormwater Associated with Construction Activity Construction General Permit Order 2009- 0009-DWQ (General Construction Permit). The General Construction Permit requires the Applicant to prepare and implement a SWPPP. The SWPPP would specify BMPs to be used during construction of the proposed project to minimize or avoid water pollution, thereby reducing potential short-term impacts to water quality. Upon completion of the proposed project, the Applicant would be required to submit a Notice of Termination to the SWRCB to indicate that construction has been completed. Further, project construction activities would be required to comply with the water quality BMPs set forth in CMC Chapter 8, Storm Water and Urban Runoff Pollution Control. This chapter contains the City’s Storm Water Management and Discharge Control Ordinance and includes conditions and requirements established to control urban pollutant runoff into the City’s stormwater system. Compliance with the General Construction Permit requirements and CMC Chapter 8, Storm Water and Urban Runoff Pollution Control, would reduce the proposed project’s short-term impacts to surface water quality to less-than-significant levels.

As it relates to groundwater quality, as noted above, there are known groundwater impacts at the project site. Concentrations of petroleum hydrocarbon in the groundwater, as monitored in existing monitoring wells on the project site, generally appeared to be stable or decreasing, with a few instances of fluctuation. As groundwater was encountered at depths of 12.5 and 17.6 feet beneath the existing ground surface, the proposed excavation of a maximum of 6 feet would not impact the petroleum hydrocarbon-impacted groundwater. Therefore, the proposed project’s short-term impacts to groundwater quality would be less than significant.

###### Operation

The primary constituents of concern during the operational phase of the proposed project would be solids, oils, and greases from parking areas, driveways, and truck loading bays that could be carried off-site. Project design features would address the anticipated and expected pollutants of concern during the proposed project’s operational phase. On-site landscaping, which would comprise approximately 10.2 percent of the total project site after construction of the proposed project, would assist in minimizing the amount of runoff from the project site by providing permeable areas for water infiltration and decreasing runoff volume. Infiltration through landscaped areas would also serve as a water treatment function.

Requirements for waste discharges potentially affecting stormwater from project operations are set forth in CMC Chapter 8, Storm Water and Urban Runoff Pollution Control. Standard Urban Stormwater Mitigation Plan (SUSMP) requirements include minimizing stormwater pollutants and limiting peak post-project stormwater runoff rates to no greater than predevelopment rates where increased runoff could increase downstream erosion.

As described in the LID Plan, as provided in **Appendix J** of this IS/MND, the project site is relatively level with drainage consisting of surface flow. The project site drains towards the west to an existing 5-foot storm drain inlet that outlets directly to the Dominguez Channel. Under the proposed project, the project site would drain from east to west via gutters that wrap around the proposed buildings. The runoff generated would be treated by a 10-foot by 20-foot Modular Wetland System that would discharge via an 18-inch pipe to the existing 5-foot storm drain inlet, as under existing conditions. As such, surface water quality would not be degraded.

As noted above in Section IX, Hazards and Hazardous Materials, there are known groundwater impacts at the project site. There are 16 groundwater monitoring wells present at the project site that are used as part of the groundwater monitoring program. Primary groundwater contaminants of concern identified in these wells included total petroleum hydrocarbons in the gasoline range, benzene and diisopropyl ether. It was noted that concentrations in existing monitoring wells generally appeared to be stable or decreasing, with a few instances of fluctuation. Groundwater monitoring would continue during operation of the proposed project.

In general, projects control pollutants, pollutant loads, and runoff volume from the project site by minimizing the impervious surface area and controlling runoff through infiltration, bioretention, or rainfall harvest and use. Additionally, projects are required to incorporate BMPs as outlined in the SWPPP and in accordance with the requirements of the municipal NPDES permit. Compliance with these water quality and water discharge standards would ensure that the proposed project would not degrade surface or ground water quality, and impacts would be less than significant.

b) The project site is located in an urbanized area of the City of Carson and is currently two vacant undeveloped parcels. The project site consists of mostly pervious surfaces. As described in the Utilities Memorandum, as provided in **Appendix I** of this IS/MND, the project site is approximately 3.5 percent impervious. With development of the proposed project, as analyzed in the Utilities Memorandum, the project site would be 89.8 percent impervious. However, while under the proposed condition impervious surfaces would increase, the project site is not located near groundwater recharge wells and no groundwater recharge facilities exist downstream of the project site.

In addition, no new sources of water supply, such as groundwater, are required to meet the proposed project’s water demand. Potable water would be supplied by the California Water Service (Cal Water) Dominguez District. Based on the 2020 Urban Water Management Plan (UWMP), the Cal Water Dominguez District receives its water from 17 percent groundwater, 15 percent recycled water, and 68 percent purchased water (California Water Service 2020). The proposed project uses would not result in a substantial increase in demand as the self-storage units would not generate a demand for water and the proposed office and retail uses would generate minimal water use. Therefore, implementation of the proposed project would not significantly affect groundwater supplies. Furthermore, as noted above, the project site is not located near groundwater recharge wells and no groundwater recharge facilities exist downstream of the project site. Therefore, the proposed project would not substantially deplete groundwater supplies or interfere with groundwater recharge that may impede sustainable groundwater management of the basin and, thus, impacts would be less than significant.

c.i) While no streams, rivers, or natural drainages occur on the project site, the Dominguez Channel is located to the west of the project site; a flood control easement separates the Dominguez Channel from the project site. The project site is located in an urban area and is currently two vacant undeveloped parcels. Existing surface runoff from the project site is currently directed to an existing 5-foot storm drain inlet that outlets directly to the Dominguez Channel. Under the proposed project, the project site would drain from east to west via gutters that wrap around the proposed buildings. The runoff generated would be treated by a 10-foot by 20-foot Modular Wetland System that would discharge via an 18-inch pipe to the existing 5-foot storm drain inlet, as under existing conditions. As described above, impervious surfaces would increase from approximately 3.5 percent impervious to 89.8 percent impervious in the proposed condition. As discussed above, during construction, the proposed project would be required to comply with BMP’s identified in the RWQCB issued SWPPP, which would reduce the potential for erosion or siltation to occur. During project operation, the project site would be fully developed with buildings and landscaping and would not contain exposed soils. Therefore, compliance with BMPs would ensure that the proposed project would not substantially alter the drainage pattern of the project site in a manner that would result in the substantial erosion or siltation on- or off-site and impacts would be less than significant.

c.ii) While no streams, rivers, or natural drainages occur on the project site, the Dominguez Channel is located to the west of the project site. The project site is located in an urban area and is currently two vacant undeveloped parcels. As described above, surface runoff is currently directed to an existing 5-foot storm drain inlet that outlets directly to the Dominguez Channel. Under the proposed project, the project site would drain from east to west via gutters that wrap around the proposed buildings. The runoff generated would be treated by a 10 foot by 20-foot Modular Wetland System that would discharge via an 18‑inch pipe to the existing 5-foot storm drain inlet, as under existing conditions. As described above, impervious surfaces would increase from approximately 3.5 percent impervious to 89.8 percent impervious in the proposed condition. As further analyzed in the drainage report, under the proposed project, peak flowrates would increase from 3.12 cubic feet per second (cfs) to 6.74 cfs. As detailed in the Utilities Memorandum, all proposed on-site conveyances for the proposed project were designed to safely convey the flowrates generated by a 100-year storm and flooding on-site is not anticipated. Therefore, a less-than-significant impact resulting from flooding would occur.

c.iii) The project site is located in an urban area and is currently two vacant undeveloped parcels. As described above, surface runoff is currently directed to an existing 5-foot storm drain inlet that outlets directly to the Dominguez Channel. Under the proposed project, the project site would drain from east to west via gutters that wrap around the proposed buildings. The runoff generated would be treated by a 10 foot by 20-foot Modular Wetland System that would discharge via an 18-inch pipe to the existing 5-foot storm drain inlet, as under existing conditions. As discussed above, the Applicant would be required to comply with the standard BMPs in the SWPPP, as identified by the RWQCB. Therefore, the proposed project would not provide substantial additional sources of polluted runoff, and potential impacts to surface water quality would be less than significant. Furthermore, the existing drainage pattern would remain largely the same under the proposed project, and thus, the proposed project would be adequately served by the existing 5-foot storm drain inlet during project operations. Therefore, the proposed project would not exceed the capacity of existing or planned storm drain systems and impacts would be less than significant.

c.iv) The project site is not within 100-year flood hazard area as indicated by the Federal Emergency Management Agency (FEMA 2020). In addition, the proposed project would adhere to all standards and requirements identified in the CMC Chapter 8 and project specific SWPPP, which would require implementation of measures that reduce the potential for flooding on- or off-site. Thus, adherence with these measures would ensure that impacts are less than significant.

d) As discussed above, the project site is not within 100-year flood hazard area as indicated by the Federal Emergency Management Agency (FEMA 2020). In addition, the proposed project would adhere to all standards and requirements identified in the CMC Chapter 8 and project specific SWPPP, which would require implementation of measures that reduce the potential for flood hazards.

Due to the distance of the City to the Pacific Ocean, located approximately 5.58 miles west of the City, the potential for tsunami effects within the City is negligible. Furthermore, the absence of any large bodies of water within Carson preclude the possibility of damage from seiche effects on the project site (City of Carson 2004). Given the lack of flood hazard, tsunami, or seiche risk in the project area, there would be no impacts anticipated.

e) There are no applicable water quality control plan or sustainable groundwater management plans for the project site. As stated above, the project site is located in an urbanized area and is currently two vacant undeveloped parcels. The project site has been previously developed and does not serve as a source of groundwater. Therefore, the proposed project would not conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater management plan and there would be no impacts anticipated.

#### XI. Land Use and Planning

| ***Issues (and Supporting Information Sources)*** | ***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? |  |  |  |  |
| 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? |  |  |  |  |

##### Discussion

a) The project site is located in an urbanized area of the City of Carson and is currently vacant and undeveloped. Development of the proposed project would not physically divide an established community as the proposed project would develop two vacant parcels surrounded by urbanized uses with uses similar to those in the surrounding area. Thus, the proposed project would not divide an established community and no impacts would occur.

b) According to the City of Carson General Plan, the project site has a General Plan land use designation of Light Industrial and a zoning code designation of Manufacturing Light – with Site Plan and Design Review Overlay (ML-D). The proposed project would require a general plan amendment (from Light Industrial to Heavy Industrial), zone change, corresponding general plan and zone text/map amendments and adoption of a specific plan for specific uses and deviations from the development standards that may not apply.

**Table 9**, General Plan Consistency Analysis, analyzes the proposed project’s consistency with relevant General Plan Land Use Element goals and policies. As demonstrated in Table 9,the proposed project is consistent with the General Plan Land Use Element.

The City uses the specific plan process to establish type, location, and character of development to take place on a property (City of Carson 2002). Although a specific plan allows flexibility of development in regard to land use and design concepts, the overall design guidelines are required to follow City standards. The proposed project would be designed to be compatible with zoning and design regulations as detailed in the specific plan and would adhere to allowable building height and setbacks.

Based on the analysis above and upon approval of the requested entitlements, the proposed project would not conflict with applicable goals and policies in the General Plan or applicable regulations under the Zoning Code. Therefore, the proposed project would result in less-than-significant impacts.

| Table 9  General Plan Consistency Analysis | |
| --- | --- |
| Relevant Policies | Project Consistency Analysis |
| Goal LU-2: Rehabilitation and/or removal of abandoned buildings and facilities. | As discussed in the Phase I ESA, the project site formerly was improved with commercial/industrial uses. These uses were demolished between 2009 and 2012. There are no habitable structures present on the project site, however, remnant improvements are still present on the project site. Under the proposed project, the remnant structures would be removed, and a self-storage facility would be developed. The redevelopment of the project site would not conflict with this goal. |
| Goal LU-6: A sustainable balance of residential and non-residential development and a balance of traffic circulation throughout the City. | The proposed project would be developed on a site that was previously developed with commercial/industrial uses. The proposed uses include a self-storage facility which would be in keeping with the previous uses on the project site as well as the surrounding existing commercial uses along East Carson Street. As such, development of the proposed project would not conflict with this goal. |
| Policy LU-12.3: Review landscape plans for new development to ensure that landscaping relates well to the proposed land use, the scale of structures, and the surrounding area.  Policy LU-12.5: Improve City appearance requiring landscaping to screen, buffer, and unify new and existing development. Mandate continued upkeep of landscaped areas. | As described in Chapter 2, Project Description, the proposed project would include approximately 12,134 square feet of landscaping around the perimeter of the project site. A variety of drought tolerant ornamental shrubs and medium size trees, which would be varying in height, would be included as a part of the proposed landscaping. In addition, a landscape screen would be installed on the northern boundary of the project site, which would serve to screen the self-storage facility from the residential uses directly to the north of the project site. These landscape features would not conflict with these policies. |
| Policy LU-13.4: Encourage architectural variation of building and parking setbacks along the streetscape to create visual interest, avoid monotony and enhance the identity of individual areas. Encourage pedestrian orientation by appropriate placement of buildings. | As described further in Chapter 2, Project Description, the proposed project would consist of neutral-toned building materials in Spanish styled architecture, which include Spanish accents, Spanish tile roof, spandrel glazing, and landscaping. The proposed design would largely resemble a multi‐family residential building in its aesthetics and massing. This design would provide for architectural variation along Carson Street, creating visual interest and avoiding monotony and would not conflict with this policy. |
| Policy LU-15.1: Encourage the location of housing, jobs, shopping, services, and other activities within easy walking distance of each other. | The proposed project includes cafe/retail uses totaling 4,675 square feet in proximity to residential uses and the nearby Perry Street Mini-Park. The location of the cafe/retail uses would serve to encourage residents to the north and southeast of the project site to walk to the project site. As such, the proposed project would not conflict with this policy. |
| Policy LU-15.7: Provide for efficient use of water through the use of drainage, drought tolerant landscaping, and use of reclaimed water, efficient appliances, and water conserving plumbing fixtures. | As described above, a variety of drought tolerant ornamental shrubs and medium size trees, which would be varying in height, would be included as a part of the proposed landscaping. The use of drought tolerant landscaping would provide for efficient use of water and would not conflict with this policy. |
| SOURCE: ESA 2022. | |

#### XII. Mineral Resources

| ***Issues (and Supporting Information Sources)*** | ***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? |  |  |  |  |
| 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? |  |  |  |  |

##### Discussion

a) The project site is located in the City of Carson in an urbanized area, on two vacant parcels with surrounding residential and commercial uses. According to the Los Angeles County Conservation and Natural Resources Element and the California Department of Conservation (CDC), the project site is not in Mineral Resource Zone 2 (MRZ-2), as identified in Figure 9.6, Mineral Resources (County of Los Angeles 2015), and the CDC Mineral Lands Classification Map (CDC 2022). MRZ-2 zones are characterized as areas that are underlain by significant measured or indicated mineral resources. Additionally, according to the City’s General Plan Safety Element, the City does not contain any known mineral resources (City of Carson 2004). No mineral extraction or other mining operations have historically or currently occur within the project site, nor would the proposed project result in the loss of availability of any known mineral resource. Therefore, no impact to a known mineral resource would occur.

b) No mineral extraction or other mining operations have historically or currently occurred within the project site, nor would the proposed project result in the loss of availability of any locally important mineral resource. In addition, the project site is not identified as an area that contains known mineral resources in the City’s General Plan (City of Carson 2004). Therefore, no impacts would occur to a locally important mineral resources.

#### XIII. Noise

| ***Issues (and Supporting Information Sources)*** | ***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? |  |  |  |  |
| b) Generation of excessive groundborne vibration or groundborne noise levels? |  |  |  |  |
| c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? |  |  |  |  |

##### Discussion

a) Noise is defined as unwanted sound; however, not all unwanted sound rises to the level of a potentially significant noise impact. To differentiate unwanted sound from potentially significant noise impacts, the City of Carson has established noise regulations that take into account noise-sensitive land uses. The following analysis evaluates potential noise impacts at nearby noise-sensitive land uses that may result from construction and operation of the proposed project.

###### Noise Principles and Descriptors

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air). Noise is generally defined as unwanted sound (i.e., loud, unexpected, or annoying sound). Acoustics is defined as the physics of sound. In acoustics, the fundamental scientific model consists of a sound (or noise) source, a receiver, and the propagation path between the two. The loudness of the noise source and obstructions or atmospheric factors affecting the propagation path to the receiver determines the sound level and characteristics of the noise perceived by the receiver. Acoustics addresses primarily the propagation and control of sound (Caltrans 2013a, Section 2.2.1).

Sound, traveling in the form of waves from a source, exerts a sound pressure level (referred to as sound level) that is measured in decibels (dB), which is the standard unit of sound amplitude measurement. The dB scale is a logarithmic scale (i.e., not linear) that describes the physical intensity of the pressure vibrations that make up any sound, with 0 dB corresponding roughly to the threshold of human hearing and 120 to 140 dB corresponding to the threshold of feeling and pain, respectively. In a non-controlled environment, a change in sound level of 3 dB is considered “just perceptible,” a change in sound level of 5 dB is considered “clearly noticeable,” and a change in 10 dB is perceived as a doubling of sound volume (Caltrans 2013a, Section 2.1.3). Pressure waves traveling through air exert a force registered by the human ear as sound (Caltrans 2013a, Section 2.1.3).

The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, when assessing potential noise impacts, sound is measured using an electronic filter that deemphasizes the frequencies below 1,000 hertz (Hz) and above 5,000 Hz in a manner corresponding to the human ear’s decreased sensitivity to extremely low and extremely high frequencies. This method of frequency weighting is referred to as A-weighting and is expressed in units of A-weighted decibels (dBA). A-weighting follows an international standard methodology of frequency de-emphasis and is typically applied to community noise measurements (Caltrans 2013a, Section 2.1.3).

An individual’s noise exposure is a measure of noise over a period of time, whereas a noise level is a measure of noise at a given instant in time. Community noise varies continuously over a period of time with respect to the contributing sound sources of the community noise environment. Community noise is primarily the product of many distant noise sources, which constitute a relatively stable background noise exposure, with the individual contributors unidentifiable. The background noise level changes throughout a typical day, but does so gradually, corresponding with the addition and subtraction of distant noise sources such as traffic. What makes community noise variable throughout a day, besides the slowly changing background noise, is the addition of short-duration, single-event noise sources (e.g., aircraft flyovers, motor vehicles, sirens), which are readily identifiable to the individual. These successive additions of sound to the community noise environment change the community noise level from instant to instant, requiring the measurement of noise exposure over a period of time to legitimately characterize a community noise environment and evaluate cumulative noise impacts (Caltrans 2013a, Section 2.2.2.1).

The time-varying characteristic of environmental noise over specified periods of time is described using statistical noise descriptors in terms of a single numerical value, expressed as dBA. The most frequently used noise descriptors are summarized below (Caltrans 2013a, Section 2.2.2.2):

Leq: The Leq, or equivalent continuous sound level, is used to describe the noise level over a specified period of time, typically 1-hour, i.e., Leq(1), expressed as Leq. The Leq may also be referred to as the “average” sound level.

Lmax: The maximum, instantaneous noise level.

Lmin: The minimum, instantaneous noise level.

LX: The noise level exceeded for specified percentage (x) over a specified time period; i.e., L50 and L90 represent the noise levels that are exceeded 50 and 90 percent of the time specified, respectively.

Ldn: The Ldn is the average noise level over a 24-hour day, including an addition of 10 dBA to the measured hourly noise levels between the hours of 10 p.m. to 7 a.m. to account for nighttime noise sensitivity. Ldn is also termed the day-night average noise level or DNL.

CNEL: Community Noise Equivalent Level (CNEL), is the average noise level over a 24-hour day that includes an addition of 5 dBA to the measured hourly noise levels between the evening hours of 7 p.m. to 10 p.m. and an addition of 10 dBA to the measured hourly noise levels between the nighttime hours of 10 p.m. to 7 a.m. to account for noise sensitivity during the evening and nighttime hours, respectively. CNEL and Ldn noise levels typically differ by less than 1 dBA and are generally interchangeable.

###### City of Carson Municipal Code

CMC Article 5, Chapter 5, details the City’s approach to noise control and standards. CMC Section 5500 states the City’s intent to adopt the Los Angeles County Municipal Code (LACMC) Noise Control Ordinance (Title 12, Chapter 12.08) as the CMC’s own noise control ordinance with some key amendments. LACMC Section 12.08.390(B) sets standards for acceptable exterior noise levels. The standards are intended to protect the community from excessive noise levels that have the potential to: (i) interfere with sleep, communication, relaxation, and enjoyment of property; (ii) contribute to hearing impairment; and (iii) adversely affect the value of property. The standards for exterior noise levels are summarized in Table 10, City of Carson Exterior Noise Level Standards. Noise measurement calculations are provided in **Appendix K** of this IS/MND.

|  |  |  |
| --- | --- | --- |
| Table 10  City of Carson Exterior Noise Level Standards | | |
| Zone | Time Interval | Hourly Equivalent Sound Level (dBA, Leq) |
| I. Noise Sensitive Area | Anytime | 45 dBA |
| II. Residential Properties (nighttime) | 10 p.m. to 7 a.m. | 45 dBA |
| Residential Properties (daytime) | 7 a.m. to 10 p.m. | 50 dBA |
| III. Commercial Properties (nighttime) | 10 p.m. to 7 a.m. | 55 dBA |
| Commercial Properties (daytime) | 7 a.m. to 10 p.m. | 60 dBA |
| IV. Industrial Properties | Anytime | 70 dBA |
| SOURCE: LACMC Section 12.08.390. | | |

CMC Article 5, Chapter 5, Section 5502, provides a list of amendments added to the LACMC for application in the City of Carson. Section 5502 amends CMC Chapter 12.08, Part 4, to address noise standards for construction activities with nearby residential land uses. Long-term construction (defined as more than 21 days of scheduled work) is permitted Monday through Saturday from 7 a.m. to 8 p.m. given construction does not exceed 65 dBA in single-family residential areas, 70 dBA in multi-family residential areas, and 70 dBA in semi-residential/commercial areas. Construction noise levels take precedence over the noise standards listed in Table 10, above. Section 5502(h) lists amendments to the LACMC for procedures for obtaining a variance from the requirements of CMC Article 5, Chapter 5, which may be granted by the Planning Commission for a period not to exceed 2 years, subject to such terms, conditions and requirements as may be reasonable under the circumstances.

###### City of Carson General Plan Noise Element

In addition to the previously described CMC provisions, the City has also established noise guidelines in the Noise Element of the City’s General Plan that are used for planning purposes (City of Carson 2002). These guidelines are based in part on the community noise compatibility guidelines established by the California State Governor’s Office of Planning and Research and are intended for use in assessing the compatibility of various land use types with a range of noise levels (Office of Planning and Research 2017). Table 11, City of Carson Guidelines for Noise Compatible Land Use, provides the guidelines of land use compatibility for community noise sources. The CNEL noise levels for specific land uses are classified into four categories: (1) “normally acceptable”; (2) “conditionally acceptable”; (3) “normally unacceptable”; and (4) “clearly unacceptable.” A CNEL value of 65 dBA is considered the dividing line between a “conditionally acceptable” and “normally unacceptable” noise environment for noise sensitive land uses, including residences, and schools. A CNEL value of 70 dBA is considered the dividing line between a “normally acceptable” and “normally unacceptable” noise environment for noise sensitive land uses, including neighborhood parks.

###### Thresholds of Significance

The City of Carson’s noise ordinances regulate construction and operational noise. With respect to the community noise assessment, changes in noise levels of less than 3 dBA are generally not discernable to most people, while changes greater than 5 dBA are readily noticeable and would be considered a significant increase. Therefore, the significance threshold for mobile source noise is based on human perceptibility to changes in noise levels (increases) with consideration of existing ambient noise conditions and City’s land use noise compatibility guidelines. Therefore, the proposed project would result in a significant noise impact if:

* For sensitive receptors located in the City of Carson, project construction activities would generate noise levels in one of the following two conditions: (a) in single-family residential areas that exceed a maximum of 65 dBA for single-family residential uses or a maximum of 70 dBA for multi-family residential, semi-residential, or commercial uses between the hours of 7 a.m. and 8 p.m., Monday through Saturday; or (b) in residential areas that exceed the ambient noise-based threshold (ambient noise + 5 dBA) between the hours of 7 a.m. and 8 p.m., Monday through Saturday.
* Project on-site stationary sources (i.e., air conditioning units, pumps) increase existing ambient noise levels at adjacent sensitive receptors by 5 dBA or more if the existing noise levels do not already exceed the City’s exterior noise standards, or by 3 dBA or more if the existing noise levels already exceed the City’s exterior noise standards or if the resulting noise levels would result in the exceedance of the City’s exterior noise standards.
* Project-related off-site traffic increases ambient noise levels by 5 dBA CNEL or more along roadway segments with sensitive receptors, and the resulting noise level occurs on a noise-sensitive land use within an area categorized as “normally acceptable;” or causes ambient noise levels to increase by 3 dBA CNEL or more and the resulting noise occurs on a noise-sensitive land use within an area categorized as “conditionally acceptable,” “normally unacceptable,” or “clearly unacceptable.”

| Table 11  City of Carson Guidelines for Noise Compatible Land Use | | | | |
| --- | --- | --- | --- | --- |
| Land Use Categories | Community Noise Exposure (CNEL, dB) | | | |
| Normally Acceptable | Conditionally Acceptable | Normally Unacceptable | Clearly Unacceptable |
| Residential – Low Density | 50–60 | 60–65 | 65–75 | 75–85 |
| Residential Multi-Family | 50–60 | 60–65 | 65–75 | 75–85 |
| Transient Lodging, Hotel, Motel | 50–65 | 65–70 | 70–80 | 80–85 |
| School, Library, Church, Hospital, Nursing Home | 50–60 | 60–65 | 65–80 | 80–85 |
| Auditorium, Concert Hall, Amphitheater | N/A | 50–65 | N/A | 65–85 |
| Sports Arena, Outdoor Spectator Sports | N/A | 50–70 | N/A | 70–85 |
| Playground, Neighborhood Park | 50–70 | N/A | 70–75 | 75–85 |
| Golf Course, Riding Stable, Water Recreation, Cemetery | 50–70 | N/A | 70–80 | 80–85 |
| Office Building, Business, Commercial, Professional | 50–67.5 | 67.5–75 | 75–85 | N/A |
| Agriculture, Industrial, Manufacturing, Utilities | 50–70 | 70–75 | 75–85 | N/A |
| NOTES:  Based on the Governor’s Office of Planning and Research, “General Plan Guidelines” 1990. To help guide determination of appropriate land use and mitigation measures vis-a-vis existing or anticipated ambient noise levels.  A = Normally Acceptable: Specified land use is satisfactory, based upon the assumption buildings involved are conventional construction, without any special noise insulation.  C = Conditionally Acceptable: New construction or development only after a detailed analysis of noise mitigation is made and needed noise insulation features are included in project design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will suffice.  N = Normally Unacceptable: New construction or development generally should be discouraged. A detailed analysis of the noise reduction requirements must be made and noise insulation features included in the design of a project.  U = Clearly Unacceptable: New construction or development should generally not be undertaken.  SOURCE: City of Carson 2002 | | | | |

###### Noise Sensitive Receptors

The project area is located at 21611 South Perry Street on the north side of East Carson Street east of I-405 and Dominguez Channel. The following land uses are located in proximity to the project area:

* West – Land use immediately west of the project area is the Dominguez Channel. Further west of the project area there is the I-405.
* North – Land uses north of the project area consists of single-family residential uses approximately 50 feet from the project site.
* East – Land uses to the east of the project area consists of non-noise-sensitive commercial uses and noise-sensitive residential uses.
* South – Land uses to the south of the project site across East Carson Street consists of non-noise-sensitive commercial uses.

###### Existing Conditions

The proposed project is located in an area surrounded by a mixture of land uses including residential and commercial uses. The project site is located north of East Carson Street, east of I-405 and the Dominguez Channel, west of South Perry Street, and south/southwest of Perry Street Mini-Park and single-family residential neighborhoods. An auto repair facility and a truck dealer are located to the east and south across South Perry and East Carson Streets. The City of Carson’s General Plan designates the project site as Light Industrial.

To quantify the existing noise environment of the project site, four short-term (15‑minute) noise measurements were conducted at locations R1 through R4, located around the project site to the north, northwest, east, and southeast along South Perry Street and East Carson Street. Ambient sound measurements were conducted on Thursday, October 21, 2021, to characterize the existing noise environment in the project vicinity.

The ambient noise measurement was conducted in accordance with the City’s standards. The ambient noise measurement was conducted using a Larson-Davis Model LxT Sound Level Meter (SLM). The Larson-Davis LxT SLM is a Type 1 standard instrument, as defined in the American National Standard Institute (ANSI) S1.4. The SLM was calibrated and operated according to manufacturer specifications. The SLM microphone was placed at a height of 5 feet above ground level.

This monitoring location provides a representative characterization of the existing noise conditions within the vicinity of the project site. The results of the ambient noise measurement data are summarized in Table 12, Summary of Ambient Noise Measurements. As shown in Table 12, the measured Leq ranges from 56.5 to 72.0 dBA. Vehicular traffic is the dominant source for noise in the project area.

| Table 12  Summary of Ambient Noise Measurements | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| Site ID | Monitoring Date(s) | Start Time | End Time | Leq | Lmax | Lmin |
| R1 north of project site along residential property line | 10/21/2021 | 8:55 a.m. | 9:10 a.m. | 58.6 | 63.1 | 53.8 |
| R2 at northeast corner of South Perry Street and East 216th Street | 10/21/2021 | 9:17 a.m. | 9:32 a.m. | 56.5 | 68.7 | 50.6 |
| R3 east of project site along South Perry Street | 10/21/2021 | 9:33 a.m. | 9:48 a.m. | 57.1 | 70.2 | 52.3 |
| R4 southeast of project site along and south of East Carson Street | 10/21/2021 | 10:02 a.m. | 10:17 a.m. | 72.0 | 82.9 | 54.0 |
| SOURCE: ESA 2022 | | | | | | |

###### Construction Noise

Project construction is expected to commence in first quarter of 2023 and would last through third quarter of 2024. The proposed project consists of (1) site preparation, (2) grading/excavation, (3) drainage/utilities/trenching, (4) foundations/concrete pour, (5) building construction, (6) paving, (7) architectural coating, and (8) landscaping.

On-Site Construction Activities

Noise from construction activities would be generated by the operation of vehicles and equipment involved during various stages of construction: site preparation, building construction, etc. The noise levels generated by construction equipment would vary depending on factors such as the type and number of equipment, the specific model (horsepower rating), the construction activities being performed, and the maintenance condition of the equipment. To more accurately characterize construction-period noise levels, the average (Hourly Leq) noise level associated with each construction phase is estimated based on the quantity, type, and usage factors for each type of equipment used during each construction phase and are typically attributable to multiple pieces of equipment operating simultaneously. Over the course of a construction day, the highest noise levels would be generated when multiple pieces of construction equipment are operated concurrently.

Consistent with LACMC Section 12.08.440 (which was adopted by reference by the City of Carson), the construction noise levels were estimated at the property line of the closest sensitive receptor location. As previously stated, the project site is surrounded by a mix of land uses, including residential and commercial uses. The closest sensitive receptors to the project site are the single-family residences to the north located approximately 50 feet from the project site. It is conservatively assumed that multiple equipment would operate simultaneously. In reality, equipment would likely be dispersed throughout the project site; therefore, the noise levels represent a conservative maximum and actual noise levels could be lower. Further, the closest sensitive receptors in each affected area were analyzed and it is assumed that sensitive receptors located at further distances would experience lower noise levels than those disclosed below. Generally, noise attenuates at a rate of 6 dBA for every doubling of distance from the noise source.[[7]](#footnote-8) Table 13, Construction Equipment and Estimated Noise Levels, presents the list of construction equipment including approximate quantities per construction phase with reference noise levels.

The estimated noise levels, shown in Table 13**,** assumes the project contractor(s) would equip the construction equipment, stationary or mobile, with properly operating and maintained noise mufflers, consistent with the manufacturers’ standard operation procedures. These assumptions represent a worst-case noise scenario as all construction equipment used in a given phase would not typically operate concurrently and at full power, and the location of activities is routinely spread across the construction site, rather than concentrated close to the nearest noise-sensitive receptors.

| Table 13  Construction Equipment and Estimated Noise Levels | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Construction Phase and Equipment | Noise Level Lmax at 50 feet (dBA) | Hourly Quantity |  | Estimated Hourly Noise Level Leq at Residences (dBA) | | | | | |
| Site Preparation | | | | | | | | | |
| Air Compressors | 80 | 2 | R1 | R2 | | R3 | | | R4 |
| Loaders | 80 | 2 |
| Skid Steer Loaders | 80 | 1 |
| Sweepers | 85 | 1 |
| Dumpers/Tenders | 84 | 2 | 74 | 71 | | 73 | | | 67 |
| Generator | 82 | 1 |
| Excavator | 85 | 1 |
| Backhoes | 80 | 1 |
| Grading/Excavation | | | | | | | | | |
| Excavator | 85 | 1 | R1 | | R2 | | R3 | R4 | |
| Graders | 85 | 1 |  | |  | |  |  | |
| Loaders | 80 | 2 |  | |  | |  |  | |
| Rollers | 85 | 1 |  | |  | |  |  | |
| Scrapers | 85 | 3 | 79 | | 76 | | 78 | 71 | |
| Sweepers/Scrubbers | 85 | 1 |  | |  | |  |  | |
| Crawler Tractors | 80 | 2 |  | |  | |  |  | |
| Backhoes | 80 | 1 |  | |  | |  |  | |
| Concrete/Industrial Saw | 90 | 1 |  | |  | |  |  | |
| Dumpers/Tenders | 84 | 2 |  | |  | |  |  | |
| Compactors | 80 | 1 |  | |  | |  |  | |
| Drainage/Utilities/Trenching | | | | | | | | | |
| Air Compressors | 80 | 1 | R1 | | R2 | | R3 | R4 | |
| Pumps | 77 | 2 |
| Rough Terrain Forklifts | 75 | 1 |
| Sweepers/Scrubbers | 85 | 1 | 76 | | 74 | | 76 | 69 | |
| Backhoes | 80 | 2 |
| Compactors | 80 | 1 |
| Dumpers/Tenders | 84 | 2 |  | |  | |  |  | |
| Excavators | 85 | 1 |
| Generator | 82 | 2 |
| Foundations/Concrete Pour | | | | | | | | | |
| Air Compressors | 80 | 1 | R1 | | R2 | | R3 | R4 | |
| Loaders | 80 | 2 |
| Pumps | 77 | 1 |
| Rough Terrain Forklifts | 75 | 1 | 78 | | 75 | | 77 | 70 | |
| Sweepers/scrubber | 85 | 1 |
| Backhoes | 80 | 1 |
| Concrete/Industrial Saws | 90 | 1 |  | |  | |  |  | |
| Compactors | 80 | 1 |
| Dumpers/Tenders | 84 | 2 |
| Building Construction | | | | | | | | | |
| Air Compressors | 80 | 2 | R1 | | R2 | | R3 | R4 | |
| Pumps | 77 | 1 |
| Rough Terrain Forklifts | 75 | 2 |
| Cement/Mortar Mixers | 80 | 2 | 78 | | 76 | | 78 | 71 | |
| Concrete/Industrial Saws | 90 | 2 |
| Cranes | 85 | 1 |
| Dumpers/Tenders | 84 | 2 |  | |  | |  |  | |
| Forklifts | 75 | 4 |
| Generator | 82 | 1 |
| **Paving** |  |  |  |  | | | | | |
| Backhoes | 80 | 1 | R1 | | R2 | | R3 | R4 | |
| Loaders | 80 | 2 |  | |  | |  |  | |
| Pavers | 85 | 1 |  | |  | |  |  | |
| Paving Equipment | 85 | 3 |  | |  | |  |  | |
| Rollers | 85 | 2 | 78 | | 75 | | 77 | 70 | |
| Sweepers/Scrubbers | 85 | 1 |  | |  | |  |  | |
| Dumpers/Tenders | 84 | 2 |  | |  | |  |  | |
| **Architectural Coatings** |  |  |  |  | | | | | |
| Air Compressors | 80 | 1 | R1 | | R2 | | R3 | R4 | |
| Rough Terrain Forklifts | 75 | 2 |  | |  | |  |  | |
| Cement/Mortar Mixers | 80 | 1 | 72 | | 68 | | 70 | 64 | |
| **Landscaping** |  |  |  |  | | | | | |
| Forklifts | 75 | 2 | R1 | | R2 | | R3 | R4 | |
| Skid Steer Loaders | 80 | 1 |  | |  | |  |  | |
| Dumpers/Tenders | 84 | 1 | 67 | | 63 | | 65 | 59 | |
| Maximum Combined Noise Levels | — | — | 81.8 | | 79.0 | | 80.9 | 74.2 | |
| NOTE:  Noise Levels at 50 feet and Usage Factor are derived from Federal Highway Administration’s Roadway Construction Noise Model User’s Guide. Usage factors are the ratio of the time that a piece of equipment is in use to the total time that it could be in use. Usage factors are typically attributable to multiple pieces of equipment operating simultaneously.  SOURCE: ESA 2022 | | | | | | | | | |

As shown in Table 13**,** estimated construction noise levels at the off-site receptors in the vicinity of the project site range from 59 to 81.8 dBA Leq. CMC Section 12.08, Part 4, limits construction noise levels to 65 dBA Leq for semi-residential receptors between the hours of 7 a.m. and 8 p.m. The project construction noise levels per phase would exceed 65 dBA Leq at the nearest sensitive source and impacts would be significant without mitigation. Because it would take a buffer zone of 400 feet from the residences to reduce the construction noise level to 65 dBA Leq (maximum combined construction noise levels range from 82 and 81 dBA Leq, respectively from R1 and R3), it is not feasible or practical to implement a buffer zone for on-site construction activity.

As stated earlier, CMC Article 5, Chapter 5, Section 5502, provides a list of amendments added to the LACMC for application in the City of Carson. Section 5502(c) amends CMC Chapter 12.08, Part 4, to address noise standards for construction activities with nearby residential land uses. Long-term construction (defined as more than 21 days of scheduled work) is permitted Monday through Saturday from 7 a.m. to 8 p.m. given construction does not exceed 65 dBA in single-family residential areas, 70 dBA in multi-family residential areas, and 70 dBA in semi-residential/commercial areas. Construction noise levels take precedence over the noise standards listed in Table 10, above.

In order to meet the criteria of the ambient noise-based threshold (ambient noise + 5 dBA) between the hours of 7 a.m. and 8 p.m., Monday through Saturday, temporary construction noise barriers would be implemented for residences to the north and east of the project site, as described in Mitigation Measure MM-NOI-1. In addition, as stated previously, it is conservatively assumed that multiple equipment would operate simultaneously near the project boundary. In reality, equipment would likely be dispersed throughout the project site; as such, the noisiest equipment, such as paving equipment or concrete saws, would be restricted to have no more than two pieces of the heavy-duty equipment use at the same time within a 50-foot distance of the project site boundary, as described in Mitigation Measure MM-NOI-2. **Table 14**,*Construction Noise Levels with Mitigation,* shows the reduced construction noise levels at the off-site sensitive receivers. Noise levels attributable to on-site construction activity would be reduced, with attenuation provided by the temporary construction noise barriers and the added distance from the sensitive receptors, to comply with the threshold of ambient noise levels plus 5 dBA. With the implementation of Mitigation Measures MM-NOI-1 and MM-NOI-2, Project construction noise would also comply with the City’s 65 dBA Leq noise threshold for single-family residences.

| Table 14  Construction Noise Levels with Mitigation | | | | |
| --- | --- | --- | --- | --- |
| Sensitive Receptor Location | Estimated Construction Noise  (Leq, dBA) | Construction Noise Levels with Mitigation  (Leq, dBA) | Construction Noise Threshold  (Ambient + 5 dBA) | Significant? |
| R1 | 81.8 | 62.8 | 63.6 | No |
| R2 | 79.0 | 60.5 | 61.5 | No |
| R3 | 80.9 | 58.5 | 62.1 | No |
| R4 | 74.2 | 73.3 | 77.0 | No |
| SOURCE: ESA 2022 | | | | |

The proposed project would comply with LACMC Section 12.08.440 and CMC Section 7-12.22; the proposed project’s construction activities, including delivery and haul routes, would be prohibited between the hours of 7 p.m. and 7 a.m. Monday through Saturday or any time on Sundays or holidays.

Therefore, with respect to a violation of the noise standards and regulations established in the CMC, noise impacts during project construction would be less than significant with implementation of Mitigation Measures MM-NOI-1 and MM-NOI-2.

Off-Site Construction Activities

During all phases of construction, haul and vendor truck trips would be required to bring construction materials and building debris to and from the project site. The temporary addition of the number of trips required per day during construction activities would not result in a doubling of trips along access roads leading to the project site. Therefore, the increase in noise level would be substantially less than the threshold of a 5 dBA increase in an area characterized by normally acceptable and conditionally acceptable noise levels or a 3 dBA increase in an area characterized by conditionally unacceptable or normally unacceptable noise levels. In order to increase traffic noise levels by 3 dBA, the traffic volumes with the proposed project would need to double from the “Existing” to the “with Project” conditions. The proposed project would not cause traffic volumes to double as a result of implementation and operation. Additionally, the off-site haul truck activities are temporary in nature and would only take place for 13 months after which the proposed project would cease to have any significant lasting noise impact on the surrounding areas. Therefore, off-site construction traffic noise impacts would be less than significant and no mitigation measures would be required.

###### Operational Noise

The existing noise environment in the project vicinity is dominated by traffic noise from nearby roadways, as well as nearby commercial activities. Long-term operation of the proposed project would have a minimal effect on the noise environment in proximity to the project area. Noise generated by the proposed project would result primarily from the added off-site traffic.

Off-Site Traffic Noise

Vehicle trips attributed to operation of the proposed project would increase average daily traffic (ADT) volumes along the major thoroughfares within the project vicinity, which was analyzed to determine if any traffic-related noise impacts would result from project development. Typically, a doubling of traffic volumes increases the hourly equivalent sound level by approximately 3 dBA (FHWA 2018). The proposed project would not double existing daily trips along access roads leading to the project site and traffic noise from the proposed project would generate less than a 3 dBA increase. Therefore, operation of the proposed project would not result in a substantial increase in project-related traffic noise levels over existing traffic noise levels in the project vicinity. The increase in noise level would be substantially less than threshold of a 5 dBA increase in an area characterized by normally acceptable and conditionally acceptable noise levels or 3 dBA increase in an area characterized by conditionally unacceptable or normally unacceptable noise levels. In order to increase traffic noise levels by 3 dBA, the traffic volumes with the proposed project would need to double from the “Existing” to the “With Project” conditions. The proposed project would not cause traffic volumes to double as a result of implementation and operation. As a result, project-related operational traffic noise impacts would be less than significant.

To predict the noise increase due to vehicular traffic, the Federal Highway Administration’s Traffic Noise Model (TNM), Version 2.5, was used to predict vehicular traffic noise levels at off-site noise-sensitive receivers based on peak hour trip rates and trip distribution from the traffic study. The estimated noise contribution from project trips was then compared to existing noise levels. The project noise contribution, existing noise levels, and estimated combined noise levels are shown in **Table 15**,*Predicted Existing Traffic Noise Levels*.

Table 15  
 Predicted Existing Traffic Noise Levels

| Roadway Segment | Existing Traffic Noise (CNEL, dBA) | Existing with Project Traffic Noise Level (CNEL, dBA) | Existing with Project Increase over Existing Noise Level | Significant? |
| --- | --- | --- | --- | --- |
| Avalon Blvd |  |  |  |  |
| n/o Carson St | 70.9 | 70.9 | 0.0 | No |
| s/o Carson St | 71.1 | 71.1 | 0.0 | No |
| Carson St |  |  |  |  |
| btwn Avalon Blvd and I-405 SB Ramps | 73.0 | 73.0 | 0.0 | No |
| btwn I-405 NB Ramps and Perry St | 71.9 | 71.9 | 0.0 | No |
| btwn I-405 SB Ramps and I-405 NB Ramps | 72.7 | 72.7 | 0.0 | No |
| btwn Perry St and Wilmington Ave | 71.6 | 71.7 | 0.1 | No |
| e/o Wilmington Ave | 71.0 | 71.0 | 0.0 | No |
| w/o Avalon Blvd | 72.0 | 72.0 | 0.0 | No |
| I-405 NB Ramps |  |  |  |  |
| n/o Carson St | 68.8 | 68.9 | 0.1 | No |
| s/o Carson St | 61.0 | 61.0 | 0.0 | No |
| I-405 SB Ramps |  |  |  |  |
| n/o Carson St | 47.3 | 47.3 | 0.0 | No |
| s/o Carson St | 69.1 | 69.1 | 0.0 | No |
| Perry St |  |  |  |  |
| btwn Project Driveway and Carson St | 58.4 | 59.0 | 0.6 | No |
| n/o Project Driveway | 58.3 | 58.4 | 0.1 | No |
| Wilmington Ave |  |  |  |  |
| n/o Carson St | 71.1 | 71.1 | 0.0 | No |
| s/o Carson St | 69.3 | 69.3 | 0.0 | No |
| SOURCE: ESA 2022 | | | | |

As shown in Table 15, the predicted project-related traffic noise level increase over existing baseline noise levels along the analyzed roadways by up to 0.6 dBA. A change of less than 1 dBA in sound levels generally cannot be perceived by the human ear and an increase of 3 dBA would be barely perceivable (Caltrans 2013b). As the increase in traffic noise levels generated by the proposed project would not exceed the 3 dBA thresholds barely perceivable by the human ear, the proposed project’s traffic noise impact would be less than significant.

**Table 16**, *Predicted Future Traffic Noise Levels*, lists the future traffic noise levels and future with project traffic noise levels. As shown in Table 16, the predicted project-related traffic noise level increase over future baseline noise levels along the analyzed roadways by up to 0.5 dBA. A change of less than 1 dBA in sound levels generally cannot be perceived by the human ear and an increase of 3 dBA would be barely perceivable (Caltrans 2013b). As the increase in traffic noise levels generated by the proposed project would not exceed the 3 dBA thresholds barely perceivable by the human ear, the proposed project’s future traffic noise impact would be less than significant.

Table 16  
 Predicted Future Traffic Noise Levels

| Roadway Segment | Future Traffic Noise (CNEL, dBA) | Future with Project Traffic Noise Level (CNEL, dBA) | Future with Project Increase over Future Noise Level | Significant? |
| --- | --- | --- | --- | --- |
| Avalon Blvd |  |  |  |  |
| n/o Carson St | 72.3 | 72.3 | 0.0 | No |
| s/o Carson St | 71.7 | 71.7 | 0.0 | No |
| Carson St |  |  |  |  |
| btwn Avalon Blvd and I-405 SB Ramps | 73.6 | 73.6 | 0.0 | No |
| btwn I-405 NB Ramps and Perry St | 72.5 | 72.5 | 0.0 | No |
| btwn I-405 SB Ramps and I-405 NB Ramps | 73.3 | 73.3 | 0.0 | No |
| btwn Perry St and Wilmington Ave | 72.2 | 72.2 | 0.0 | No |
| e/o Wilmington Ave | 71.7 | 71.7 | 0.0 | No |
| w/o Avalon Blvd | 72.9 | 72.9 | 0.0 | No |
| I-405 NB Ramps |  |  |  |  |
| n/o Carson St | 69.1 | 69.2 | 0.1 | No |
| s/o Carson St | 61.1 | 61.1 | 0.0 | No |
| I-405 SB Ramps |  |  |  |  |
| n/o Carson St | 47.4 | 47.4 | 0.0 | No |
| s/o Carson St | 69.3 | 69.3 | 0.0 | No |
| Perry St |  |  |  |  |
| btwn Project Driveway and Carson St | 58.5 | 59.0 | 0.5 | No |
| n/o Project Driveway | 58.4 | 58.5 | 0.1 | No |
| Wilmington Ave |  |  |  |  |
| n/o Carson St | 71.2 | 71.2 | 0.0 | No |
| s/o Carson St | 69.4 | 69.4 | 0.0 | No |
| SOURCE: ESA 2022 | | | | |

On-Site Operational Noise

Project operations include five or six employees on-site throughout the course of the week. There would be two storage managers in the first few months of opening, two employees in the cafe and one or two employees in the mail room. However, none of these employees would be living on–site. Therefore, no noise-sensitive area would be located on the project site. Storage managers and on-site employees in the cafe and the mail room would not generate any substantial noise and there would not be any noise impacts on noise sensitive land uses in proximity of the project site.

Mechanical Equipment

The operation of mechanical equipment that would be installed for the new facility, such as air conditioners, fans, generators, and related equipment, would generate audible noise levels in proximity to the equipment. Mechanical equipment would typically be located on rooftops or within buildings, shielded from nearby land uses by parapet or building walls to attenuate noise and avoid conflicts with noise sensitive land uses in proximity of the project site. All building outdoor mounted mechanical and electrical equipment would be designed to meet the requirements of Municipal Code Section 12.08.390. A conservative exterior noise level reference for air condenser units, the primary source of noise from fixed mechanical equipment, is 81.9 dBA Leq measured at a distance of 5 feet based on a review of noise data from several large shopping center projects in Southern California (Moreno Valley 2015; Pomona 2014).

The analysis conservatively assumes mechanical equipment would be mounted on the building rooftop at the closest edge to the sensitive receptors to the north and east. The sensitive receptors would be approximately 200 feet from the mechanical equipment (or 160 feet from the project site’s property line) and the noise level would attenuate by 32 dBA from distance divergence to 49.9 dBA Leq. Since the ambient noise levels in the project vicinity near this sensitive receiver (refer to ambient noise measurement R1) already exceeded the City of Carson’s noise standards for stationary operational noise sources, the determination of noise impact is then to compare project-related noise levels to the prevailing ambient noise levels at the sensitive receiver site. The projected noise level of 49.9 dBA Leq would not exceed the significant threshold of 62.1 dBA or 63.6 dBA (ambient noise plus 5 dBA) Leq at the sensitive receptors to the east and north, respectively. Therefore, environmental impacts related to the exposure of persons to or generation of noise levels in excess of established standards during long-term operation of the proposed project would be less than significant.

Loading Activity and Refuse Collection

The proposed project would have on-site refuse collection areas located at the back of the building near the western project site and would be accessed from East Carson Street to the south of the project site boundary.

Refuse collection vehicles would travel on East Carson Street for refuse pickup; however, refuse pickup generally lasts for several minutes similar to refuse pickup services for all other uses in the area, which would generate an incidental amount of noise and would not significantly contribute to permanent noise increases in the area.

Loading activities, such as truck movements/idling and loading/unloading operations, would generate noise levels of approximately 70 dBA Leq at a reference distance of 50 feet from the noisiest portion of the truck (i.e., to the side behind the cab and in line with the engine and exhaust stacks), based on a noise survey that was conducted by ESA at a loading dock facility, which shows that loading dock activity (namely idling semi-trucks and backup alarm beeps) would generate such noise levels. Delivery truck idling is restricted to no more than 5 consecutive minutes in the loading area pursuant to State regulation (Title 13 California Code of Regulations, Section 2485). Pursuant to Title 13 California Code of Regulations, Section 2485, signs would be posted in delivery loading areas specifying this idling restriction. Loading area noise levels at the noise sensitive receptors are summarized in Table 17, Estimated Loading Area Noise Levels *(LEQ)*. As shown, the proposed project’s loading area noise contribution would not increase the ambient noise by more than 5 dBA; therefore, impacts would be less than significant.

| Table 17  Estimated Loading Area Noise Levels (Leq) | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| Receptor Location | Distance to Receptor Property Line (feet) | Existing Ambient Noise Levels, dBA (Leq)a | Estimated Loading Area Noise Levels, dBA (Leq) | Ambient + Project Noise Levels, dBA (Leq) | Significance Threshold, dBA (Leq) | Exceed Significance Threshold |
| Residential uses to the north | 160 | 58.6 | 59.9 | 62.3 | 63.6 | No |
| NOTE:  a Existing ambient noise measurement was taken along the project site’s northern boundary along the residential property line and is representative of the noise environment in the surrounding area. Noise measurement data is provided as part of **Appendix K** of this IS/MND.  SOURCE: ESA 2022 | | | | | | |

Composite Noise Impacts from Project Operations

An evaluation of the combined noise from the proposed project’s various operational noise sources (i.e., composite noise level) was conducted to conservatively ascertain the potential maximum project-related noise level increase that may occur at the noise-sensitive receptor locations included in this analysis. Noise sources associated with the proposed project would include on-site mechanical equipment, loading/refuse area, and parking area.

Composite noise levels at the noise sensitive receptors are summarized in Table 18, Estimated Composite Noise Levels from Project Operations. As shown, the proposed project’s composite noise contribution would not increase the ambient noise by more than 5 dBA; therefore, impacts would be less than significant.

| Table 18  Estimated Composite Noise Levels from Project Operations | |
| --- | --- |
| Operational Noise Sources | Residential Sensitive Receptors (160 feet north) |
| Noise Levels, dBA Leq |
| Existing (Ambient) Noise Level (A) | 58.6 |
| Project Composite Noise Sources | |
| Mechanical equipment | 49.9 |
| Loading Area | 59.1 |
| Parking Area | 34.1 |
| Project Composite Noise Level (B) | 59.6 |
| Existing Plus Project Composite Noise Level (C) = (A) + (B)a | 62.3 |
| Project Increment (C minus A) | 3.7 |
| Exceeds Threshold? | No |
| NOTE:  a Values are added logarithmically (not linearly).  SOURCE: ESA 2022 | |

###### Mitigation Measure

**MM-NOI-1.** Temporary construction noise barriers, with a minimum rating of Sound Transmission Class (STC) 30 and Noise Reduction Coefficient (NRC) 0.7, shall be implemented prior to grading/site preparation beginning on–site near the northern and northeastern project boundaries (R1, R2, and R3) as follows:

* Along the northern project boundary: A noise barrier with a minimum height of 15 feet above grade.
* Along the eastern project boundary from corner of E 216th Street to 15 feet beyond the southern edge of the multi-family complex located at 21610 S. Perry Street: A noise barrier with a minimum height of 18 feet above grade.

**MM-NOI-2.** No more than two pieces of the following specific off-road construction equipment shall be used at the same time within 50 feet the north and north-eastern boundary of the project site. Such equipment includes the following:

* Concrete Saws
* Pavers
* Paving Equipment
* Generators
* Pumps

These pieces of equipment have the highest reference noise level as indicated by the Federal Highway Administration’s Roadway Construction Noise Model User’s Guide. By limiting the number of noisy equipment operating at the same time within 50 feet of the north and north-eastern boundary of the project site, the cumulative noise effect from multiple equipment will be reduced.

b) The project improvements would be constructed using typical construction techniques. As such, it is anticipated that the equipment to be used during construction would not expose persons to or generate excessive groundborne vibration. Post-construction on-site activities would be limited to commercial uses that would not generate excessive groundborne vibration.

###### Vibration Principles and Descriptors

Groundborne vibration from development is primarily generated from the operation of construction equipment and from vehicle traffic. Groundborne vibration propagates from the source through the ground to adjacent buildings by surface waves. Vibration energy dissipates as it travels through the ground, causing the vibration amplitude to decrease with distance away from the source. Vibration in buildings is typically perceived as rattling of windows, shaking of loose items, or the motion of building surfaces. The vibration of building surfaces also can be radiated as sound and heard as a low-frequency rumbling noise, known as groundborne noise. Vibration levels for potential structural damage is described in terms of the peak particle velocity (PPV) measured in inches per second (in/sec).

Groundborne vibration is generally limited to areas within a few hundred feet of certain types of industrial operation and construction activities such as pile driving. Road vehicles rarely create enough groundborne vibration amplitude to be perceptible to humans unless the receiver is in immediate proximity to the source or the road surface is poorly maintained and has potholes or bumps. If traffic, typically heavy trucks, does induce perceptible building vibration, it is most likely an effect of low-frequency airborne noise or ground characteristics.

Building structural components also can be excited by high levels of low-frequency airborne noise (typically less than 100 Hz). The many structural components of a building, excited by low-frequency noise, can be coupled together to create complex vibrating systems. The low-frequency vibration of the structural components can cause smaller items such as ornaments, pictures, and shelves to rattle, which can cause annoyance to building occupants.

Human sensitivity to vibration varies by frequency and by receiver. Generally, people are more sensitive to low-frequency vibration. Human annoyance also is related to the number and duration of events; the more events or the greater the duration, the more annoying it becomes. Groundborne vibration related to human annoyance is generally related to root mean square (rms) velocity levels, and expressed as velocity in decibels (VdB).

###### Regulatory Framework

The City of Carson does not address vibration either in its respective municipal codes or in the Noise Element of the General Plans. With respect to groundborne vibration from construction activities, Caltrans has adopted guidelines/recommendations to limit groundborne vibration based on the age and/or condition of the structures that are located in close proximity to construction activity. With respect to residential and commercial structures, Caltrans’ technical publication, titled Transportation- and Construction-Induced Vibration Guidance Manual, provides a vibration damage potential threshold criteria of 0.5 inches per second PPV for historic and older buildings, 1.0 inch-per-second PPV for newer residential structures, and 2.0 inches per second PPV for modern industrial/‌commercial buildings. In addition, the guidance also sets 0.035 PPV as the threshold for “distinctly perceptible” human response to steady state vibration (Caltrans 2013b).

According to the Federal Transit Administration, ground vibrations from construction activities very rarely reach the level that can damage structures. A possible exception is the case of old, fragile buildings of historical significance where special care must be taken to avoid damage. The construction activities that typically generate the most severe vibrations are blasting and impact pile driving, which would not be used for the proposed project. The proposed project would use construction equipment such as skid steer loaders and excavators, which would generate groundborne vibration during excavation and foundation activities. Based on the vibration data by the Federal Transit Administration, typical vibration velocities from the operation of a large bulldozer would be approximately 0.089 inches per second PPV at 25 feet from the source of activity, 0.031 inches per second PPV at 50 feet distance, and 0.011 inches per second PPV at 100 feet distance.

###### Construction Vibration

The nearest off-site single-family residential buildings are located to the north of the project site, which are approximately 50 feet from the project site. At a distance of 50 feet, the maximum vibration level (using large bulldozer as an example, as shown above) would be reduced from the level measured at 25 feet and would be well below the Caltrans construction vibration structure damage criteria as the proposed project would not generate vibration levels at nearby buildings that would exceed the 0.5 inches per second PPV structural damage threshold or the 0.035 inches per second PPV “distinctly perceptible” human response threshold. Therefore, construction vibration impacts would be less than significant and mitigation measures are not required.

###### Operational Vibration

Once construction activities have been completed, there would be no substantial sources of vibration activities from the project area. The proposed project’s operations would include industrial-grade stationary mechanical and electrical equipment, such as pumps, compressor units, and exhaust fans, which would produce limited levels of vibration.

Groundborne vibration generated by each of the above-mentioned equipment and activities would generate approximately up to 0.0014 inches per second PPV at locations adjacent (within 50 feet) to the project site (ASHRAE 1999). The potential vibration levels from all project operational sources at the closest existing building and human annoyance receptor locations would be less than the significance criteria for building damage and human annoyance of 0.5 inches per second PPV and 0.035 inches per second PPV, respectively as the closest sensitive receptors are approximately 50 feet away from the project site. As such, vibration impacts associated with operation of the proposed project would be less than significant, and no mitigation measures are required.

c) The project area is located approximately 3.3 miles from the Compton/Woodley Airport, 4 miles from Long Beach International Airport and Torrance/Zamperini Field. However, the project site is located outside of these airports’ 65 dBA CNEL noise contour and outside of the airport influence area. Therefore, construction or operation of the proposed project would not expose people to excessive airport related noise levels and impacts would be less than significant.

#### XIV. Population and Housing

| ***Issues (and Supporting Information Sources)*** | ***Potentially Significant Impact*** | ***Less than Significant with Mitigation Incorporated*** | ***Less-than- Significant Impact*** | ***No Impact*** |
| --- | --- | --- | --- | --- |
| XIV. POPULATION AND HOUSING—Would the project: |  |  |  |  |
| a) 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 roads or other infrastructure)? |  |  |  |  |
| b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? |  |  |  |  |

##### Discussion

a) A project could induce population growth in an area directly or indirectly. For example, direct population growth can occur by introducing new businesses or residential areas and indirect growth by extending roads or other infrastructure. The project site is located in an urbanized area and is currently vacant and undeveloped. The proposed project would develop a self-storage facility with ancillary office and retail uses. Given these uses, which are not residential in nature, the proposed project would not induce direct population growth.

Employment opportunities during operation of the proposed project are not anticipated to substantially increase the population or housing in the area, since the employees would likely already live in or near the existing urbanized project area or consist of regional commuters. The proposed project would not contribute to employment growth in the City of Carson forecasted by the 2020–2045 RTP/SCS (SCAG 2020). Based on SCAG’s forecast, the anticipated 5 to 6 employees that would be generated under the proposed project would account for 0.009 percent of the employee forecast for 2024, which is the proposed project’s expected year of operation. Further, indirect growth from extension of roads and infrastructure would not be anticipated, as the proposed project would not add any new roadways, and would be served by existing infrastructure with minor proposed upgrades and connections to accommodate the proposed project. Therefore, the proposed project would not introduce unplanned infrastructure that was not previously evaluated in the adopted General Plan. The proposed project would introduce a self-storage facility that would serve the area population; however, the provision of storage services is not anticipated to induce population growth as these services are already widely available and the availability of these services does not determine housing growth. Therefore, the proposed project would not result in a substantial population increase during operation, and impacts would be less than significant.

b) The project site is located in an urbanized area of the City of Carson and is currently vacant and undeveloped. No residential uses are located on the project site. Therefore, no impacts related to the displacement of substantial quantity of existing residences would occur.

#### XV. Public Services

| ***Issues (and Supporting Information Sources)*** | ***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 government 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 following public services: |  |  |  |  |
| i) Fire protection? |  |  |  |  |
| ii) Police protection? |  |  |  |  |
| iii) Schools? |  |  |  |  |
| iv) Parks? |  |  |  |  |
| v) Other public facilities? |  |  |  |  |

##### Discussion

a.i) LACFD serves the City of Carson and responds from six fire stations located within the City. The closest station to the project site is LACFD Station 127, approximately 1.6 miles southwest from the project site at 127 West 223rd Street. In conformance with the California Constitution Article XIII, Section 35(a)(2) and *City of Hayward v. Trustee of California State University*, 242 Cal. App. 4th 833 (2015), the City has and will continue to meet its legal obligations to provide adequate public safety services, including fire protection and emergency medical services, and the need for additional fire protection and emergency medical services is not an environmental impact that CEQA requires a project proponent to mitigate.

###### Construction

Construction of the proposed project could increase the potential for on-site fires from such sources as the operation of mechanical equipment, the use of flammable construction materials, or the careless disposal of cigarettes. However, implementation of “good housekeeping” procedures by the construction contractors and the work crews would minimize fire hazards associated with the construction of the proposed project. Such measures would be in effect during construction of the proposed project.

Construction activities could also have the potential to affect fire protection services, such as emergency vehicle response times, by adding construction traffic to the street network and by partial lane closures during street improvements, utility installations, and construction staging. However, these impacts would be less than significant, as the Applicant would be required to implement a traffic management plan that would ensure that at least one lane remains open and emergency access is maintained during construction. In addition, any lane closures that would occur would require review and approval by the LACFD. Implementation of a traffic management plan would minimize the effects of construction on vehicular traffic, including emergency vehicles, and assist in the orderly flow of vehicular circulation in the area of the proposed project.

In summary, project construction would be temporary in nature and, thus, would not require additional fire protection and emergency services to the extent that there would be a need for new or expanded fire facilities in order to maintain acceptable service ratios, response times, or other performance objectives of the LACFD. Therefore, construction-related impacts to fire protection services would be less than significant.

###### Operation

The proposed project would develop a currently vacant site with a self-storage facility and ancillary office and retail uses. The proposed project would be served by the LACFD Station 36, approximately 1.46 miles southwest from the project site at 127 West 223rd Street. While the proposed project would introduce new uses to a currently vacant site, the proposed buildings would include installation of an automatic fire sprinkler system. Specifically, fire suppression within the proposed buildings would consist of an NFPA-13 sprinkler system. In addition, construction type is to be Type-II non-combustible. Furthermore, as required by the California Health and Safety Code, the proposed project would be required to comply with all requirements pertaining to fire protection systems, such as the adequate provisions of smoke alarms, fire extinguishers, building access, emergency response notification systems, and fire flows. With adherence to California Health and Safety Code, LACFD standards and regulations, the proposed project would install adequate fire protection systems and, thus, would not result in the need for new or physically altered governmental facilities, the construction of which could cause a significant environmental impact. Furthermore, a regional fire Hydrant Flow Test was performed by Cal Water for the existing hydrant on the west side of Perry Street, within the immediate vicinity of the project site, which confirms the available pressure and capacity of the existing fire hydrant is sufficient (refer to **Appendix I** of this IS/MND). Therefore, impacts to fire protection services would be less than significant.

a.ii) The project site is in the City of Carson, which is under the Los Angeles County Sheriff (LASD)’s Carson Station jurisdiction. The project site is within the Carson Station’s service area and is approximately located 0.56 miles north of the project site at 21356 S. Avalon Boulevard. In conformance with the California Constitution Article XIII, Section 35(a)(2) and the *City of Hayward v. Trustee of California State University* ruling, the City has and will continue to meet its legal obligations to provide adequate public safety services, including police protection, and the need for additional police protection is not an environmental impact that CEQA requires a project proponent to mitigate.

The self-storage facility would feature a contemporary 24-hour security system including keypad entry security gates, individually monitored and alarmed storage units, video surveillance monitoring, burglar alarms, as well as an intercom system. The on-site manger and/or other office personnel would monitor these security systems on a control panel during hours of operation. Should there be a violation of any of the security systems when the management office is closed, an independent security firm will respond. Thus, implementation of the proposed project would not significantly increase demand for police protection services provided by the LASD. In addition, the proposed project would be subject to site plan review by the City prior to project approval to ensure that it meets City requirements in regard to safety (e.g., nighttime security lighting); thus, discouraging criminal activity and reducing demand for police protection services. As such, the proposed project would not require LASD to expand or construct new stations to serve the project site and impacts would be less than significant.

a.iii) The proposed project does not include a residential component, which would create housing or any other facility that would increase the local population that would require an increase of student at local schools. Therefore, no impact would occur.

a.iv) The City of Carson contains approximately 599 acres of open space and parkland. This includes Neighborhood and Community Parks, Golf Courses, a Blimp Port, as well as drainage courses and utility transmission corridors (City of Carson 2004). Further, 243 acres of recreational open space is provided by both California State University Dominguez Hills and public schools located in the City (City of Carson 2004). The City’s standard for permanent public open space is 4 acres per 1,000 residents. The closest park to the project site is Perry Street Mini-Park, located approximately 32 feet northeast of the project site at the corner of 215th Place and South Perry Street. Project visitors are not anticipated to make use of the Perry Street Mini‐Park to an extent that would affect its performance. The proposed project would develop commercial uses and would result in a minimal increase in employees at the project site. The proposed project would not introduce inhabitants to the project area that would require the use of parks or recreational facilities in the vicinity of the project site. Therefore, no impact would occur.

a.v) The proposed project would not introduce inhabitants to the project area that would require the use of library facilities in the vicinity of the project site. Therefore, no impact would occur.

#### XVI. Recreation

| ***Issues (and Supporting Information Sources)*** | ***Potentially Significant Impact*** | ***Less than Significant with Mitigation Incorporated*** | ***Less-than- Significant Impact*** | ***No Impact*** |
| --- | --- | --- | --- | --- |
| XVI. RECREATION |  |  |  |  |
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? |  |  |  |  |
| 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? |  |  |  |  |

##### Discussion

a) As the proposed project does not include residential uses, the proposed project would not result in increased use of recreational facilities. Project visitors are not anticipated to make use of the Perry Street Mini‐Park to an extent that would cause or accelerate its substantial physical deterioration. Therefore, no impacts to neighborhood and regional parks or other recreational facilities would occur.

b) The proposed project would not include the construction or expansion of recreational facilities. In addition, the proposed project does not include residential uses which would require the construction or expansion of recreation facilities. Therefore, no impacts related to the adverse physical effect on the environment due to the construction or expansion of recreation facilities would occur.

#### XVII. Transportation

| ***Issues (and Supporting Information Sources)*** | ***Potentially Significant Impact*** | ***Less than Significant with Mitigation Incorporated*** | ***Less-than- Significant Impact*** | ***No Impact*** |
| --- | --- | --- | --- | --- |
| XVII. TRANSPORTATION—Would the project: |  |  |  |  |
| a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? |  |  |  |  |
| b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)? |  |  |  |  |
| c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? |  |  |  |  |
| d) Result in inadequate emergency access? |  |  |  |  |

##### Background

This impact analysis presented in this section is informed, in part, by the 21611 South Perry Street Local Transportation Assessment (LTA) for the proposed project prepared by Fehr & Peers on January 18, 2022, which is included as **Appendix L** of this IS/MND. The LTA addresses the proposed project’s operational impacts on traffic operations at nearby intersections as well as site access (i.e., driveway queuing, parking supply/demand). Parking is not an environmental impact requiring evaluation under CEQA, and therefore is not discussed in the analysis below.

##### Discussion

a) The project site is two vacant parcels that consist of approximately 2.8 acres located to the east of the I-405 interchange with East Carson Street. The project site is bounded by a single-family residential neighborhood to the north, a mix of residential and commercial uses to the east, a truck dealership to the south, and the Dominguez Channel to the west. Access to the project site would be provided by a new driveway on South Perry Street between East 216th Street and East Carson Street.

The project site is located adjacent to a variety of existing transportation facilities. I-405 provides the primary regional access to the project site; major arterials that would be used for local access to the project site include East Carson Street in the east/west direction and Avalon Boulevard and Wilmington Avenue in the north/south direction. With respect to roadways, the Transportation and Infrastructure Element of the City of Carson General Plan mainly considers roadway classifications as defined in the Carson Master Plan of Streets (e.g., local streets, collector streets), designated truck facilities, and traffic operations standards based on the concept of level of service (LOS). The proposed project does not propose to change any roadway classifications or established truck routes. Furthermore, the LOS measure used to govern roadway operations in the General Plan is no longer used in CEQA to determine the significance of a transportation impact. CEQA Guidelines Section 15064.3(b), which was adopted in December 2018 by the California Natural Resources Agency, require lead agencies to evaluate transportation impacts based on VMT. Project consistency with CEQA Guidelines Section 15074.3(b) is discussed below under Issue b).

The project site is served by one public transit route, Long Beach Transit Route 4, which provides connections to the Los Angeles Metropolitan Transportation Authority (Metro) J Line bus rapid transit at Carson Station and the Metro A Line light rail at Del Amo Station. There are limited bicycle facilities located near the project site; East Carson Street is designated as a Class III bike route west of I-405. Roadways adjacent to the project site generally have of 4- to 8-foot-wide sidewalks, but there are no marked crosswalks or pedestrian signals. As detailed in the City of Carson Master Plan of Bikeways and Metro’s Active Transportation Strategic Plan, there are several bike lanes and bike routes planned near the project site as well as a planned extension of the bike path along both sides of the Dominguez Channel, east of I-405. There is an existing flood control easement that separates the Dominguez Channel from the project site where the bike path could be located. Implementation of the proposed project would not remove or impede access to existing bicycle facilities, sidewalks, or transit services adjacent to the project site, nor would it affect future planned bicycle facility improvements along other nearby roadways or the Dominguez Channel.

Therefore, based on the above, impacts to program plans, ordinances, or policies addressing the circulation system would be less than significant.

1. The Technical Advisory on Evaluating Transportation Impacts in CEQA (Office of Planning and Research 2018) was used to conduct the VMT analysis pursuant to CEQA Guidelines Section 15064.3, Subdivision (b). Based on the proposed project characteristics, it can be classified as local-serving retail. As described in the Technical Advisory, local-serving retail can be screened from a quantitative VMT analysis for CEQA purposes:

“By adding retail opportunities into the urban fabric and thereby improving retail destination proximity, local-serving retail development tends to shorten trips and reduce VMT.”

Based on the above, the proposed project would not conflict with CEQA Guidelines Section 15064.3, Subdivision (b), and the impact would be less than significant.

c) An impact would occur if the proposed project substantially increased hazards due to a design feature. A review of existing site conditions and nearby roadways determined that there are no existing hazardous design features, such as sharp curves, non-standard driveways, or dangerous intersections, on–site or within the vicinity of the project site. The site was previously developed with commercial/industrial uses, and the proposed project would not introduce any such design hazards or include any uses that are incompatible with normal traffic operations. The proposed project would provide direct access to and from South Perry Street from a new driveway between East 216th Street and East Carson Street. The project driveway approach would be stop-controlled (i.e., not signalized). The LTA prepared for the proposed project (refer to **Appendix L** of this IS/MND) evaluated operating conditions for the proposed project driveway, and concluded that no potential safety issues would result from queueing at the driveway.

Impacts related to traffic hazards or incompatible uses would be expected to be similar and as such, would be less than significant.

d) A significant impact would occur if the design of the proposed project would not satisfy local emergency access requirements. As analyzed in Section IX, *Hazards and Hazardous Materials*, above, while primary access to the project site would be provided from South Perry Street, vehicles travelling to the project site during construction or operation would do so via East Carson Street, a City designated evacuation route as identified in the Multi-Hazard Functional Plan for emergency response within the City (City of Carson 2004). During construction, East Carson Street may require temporary partial lane closures. As part of the project entitlement process, the Applicant would be required to implement a traffic management plan, which would ensure that at least one lane remains open and emergency access is maintained during construction. In addition, based on the operational analysis conducted in the LTA (refer to **Appendix L** of this IS/MND), additional traffic generated by the proposed project is not anticipated to result in a noticeable increase in roadway congestion that would affect emergency access provided from East Carson Street, and operations are not likely to interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, impacts related to emergency access would be less than significant.

#### XVIII. Tribal Cultural Resources

| ***Issues (and Supporting Information Sources)*** | ***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 |  |  |  |  |
| 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. |  |  |  |  |

##### Discussion

The following discussion is based on the 21611 Perry Street Self-Storage Project, Cultural Resources Assessment Report, located in **Appendix C** of this IS/MND, as well as consultation conducted between tribes requesting consultation and the City, as provided in **Appendix M** of this IS/MND. **Appendix C** is confidential and not for public distribution.

a.i, a.ii) The NAHC maintains a confidential SLF, which contains records of sites of traditional, cultural, or religious value to the Native American community. The NAHC was contacted on November 2, 2021, to request a search of the SLF. The NAHC responded to the request in a letter dated December 16, 2021, with the results of the SLF search conducted by the NAHC, which indicated a negative search result. The NAHC provided a list of tribes who could be contacted for information regarding known and recorded sites.

Additionally, a records search was received from the SCCIC on December 7, 2021, and archival research was done in house to determine whether the study area contains any recorded cultural resources that have been previously identified or evaluated. This includes data on prehistoric sites, historic sites, multicomponent sites, prehistoric isolates, historic period isolates, and historic built resources within the project site and a 0.5-mile radius around it.

The records search included a review of all recorded archaeological resources and previous studies within a 0.5-mile radius of the project site. The records search results indicate five cultural resources studies have been conducted within the records search radius. The entirety of the 0.5-mile records search radius has been included in previous cultural resources studies. Of the five previous studies, one (LA-04512) overlaps the entirety of the project site. This study is a cultural resources inventory of the City conducted in 1977 and included extensive archival research and field survey of accessible parcels within the City. In reviewing the report, it is difficult to discern if the project site was included as part of the inventory’s field survey. The records search revealed that one cultural resource (P-19-188395) has been previously recorded within the 0.5-mile radius of the project site. This resource is a historic-period built environment resource consisting of the Shell Oil Refinery complex located approximately 0.20 miles north of the project site. No resources have been recorded within the project site. A survey of the project site further did not result in the recordation of any additional resources.

Pursuant to the requirements of AB 52 requiring government-to-government consultation, the City, as the lead agency, sent consultation notification letters via e-mail and certified U.S. mail to Native American groups geographically and culturally affiliated with the project site on October 28, 2021. The letters included a description of the proposed project, the description of the project location, and a notification of the type of consultation being initiated. To date, the City has received one response from the Native American groups regarding consultation, the details of which are provided below.

Pursuant to SB 18, the City contacted the NAHC to request the list of tribes who should be consulted regarding the proposed projects. The City has reached out to the list of tribes and is engaging in consultation with any tribes requesting SB 18 consultation.

As indicated above, only one response was received. The Gabrieleño Band of Mission Indians-Kizh Nation responded on November 10, 2021, stating that the project site is located within the tribe’s traditional ancestral territory and requested formal government-to-government consultation. The Gabrieleño Band of Mission Indians-Kizh Nation provided in a subsequent email and during phone call consultations historic topo maps of the project site as well as information regarding the Rancho San Pedro, local Native American villages, and information regarding the Dominguez Wash. The Gabrieleño Band of Mission Indians-Kizh Nation indicated that the project site is archaeologically sensitive, but did not identify any known tribal cultural resources (as defined in Public Resources Code Section 21074) within the project site. The Tribe recommended monitoring during construction and the City agreed with this recommendation and the Tribe and the City agreed to monitoring mitigation. The Tribe provided mitigation measures for tribal cultural resources as well as human remains they would like used for the project and the City adapted for the project. Upon approval from the Tribe of the mitigation measures, the City closed consultation on Monday, March 28, 2022.

Although no substantial evidence was provided to support the Kizh Tribal claim that any known sacred lands or tribal cultural resources overlap with or occur within the project site outside of the previously remediated areas, the City’s review of the Kizh Tribal information concludes that the project site has potentially high sensitivity for buried archaeological resources (outside or below the previous remediation areas) that, once encountered, could potentially be considered a tribal cultural resource as defined in Public Resources Code Sections 21074, 5020.1(k), or 5024.1.

Should any unanticipated prehistoric archaeological resources be determined during consultation between the Tribes and the City to potentially be tribal cultural resources, Public Resources Code Section 21084.3 would apply. Should the lead agency (City) determine that the project may cause a substantial adverse change to a tribal cultural resource, the agency will need to consider avoidance and preservation of the resources as well as mitigation measures outlined in Public Resources Code Section 21084.3(b)(1)–(4), which can be considered to avoid or minimize the significant adverse impacts. As stated above, as required by AB 52, consultation between the City and the Gabrieleño Band of Mission Indians-Kizh Nation was conducted. No identified tribal cultural resources as defined in Public Resources Code Section 21074(a)(1) that are listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1 (k) have been identified within the project site. However, implementation of Mitigation Measure MM-TCR-1 would avoid and/or substantially lessen the above impact by ensuring that any unanticipated tribal cultural resources are appropriately identified, documented, evaluated, and treated promptly, so they are not inadvertently damaged or destroyed. With implementation of Mitigation Measure MM TCR‑1, the impact to any unanticipated tribal cultural resources would be less than significant.

The following mitigation measures are also required to address potentially significant impacts to tribal cultural resources.

###### Mitigation Measure

MM-TCR-1. Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities.

A. The project applicant/lead agency shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor shall be retained prior to the commencement of any “ground-disturbing activity” for the subject project at all project locations (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work) outside or below the previous remediation areas. “Ground disturbing activity” shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.

B. A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the commencement of any ground-disturbing activity, or the issuance of any permit necessary to commence a ground-disturbing activity.

C. The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any discovered tribal cultural resources (TCRs), including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or “TCR”), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of the monitor logs will be provided to the project applicant/lead agency~~.~~

D. On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh Nation from a designated point of contact for the project applicant/lead agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh Nation to the project applicant/lead agency that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh Nation TCRs.

E. Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh Nation monitor. A meeting shall take place between the Applicant, the qualified Archaeologist, the Kizh Nation, and the City to discuss the significance of the find and whether it qualifies as a tribal cultural resource pursuant to Public Resources Code Section 21074(a) and appropriate treatment under CEQA. The Project Archaeologist shall provide a treatment plan as recommended in Mitigation Measure CUL-MM-1, that shall incorporate the monitoring Kizh Nation’s treatment and curation recommendations. The preferred treatment under CEQA is avoidance, but if not feasible, may include, but would not be limited to, capping in place, excavation and removal of the resource and follow-up laboratory processing and analysis, interpretive displays, sensitive area signage, or other mutually agreed upon measures. The Kizh Nation will recover and retain all discovered TCRs in the form and/or manner the Kizh Nation deems appropriate, at the Kizh Nation’s sole discretion, and for any purpose the Kizh Nation deems appropriate, including for educational, cultural, and/or historic purposes.

#### XIX. Utilities and Service Systems

| ***Issues (and Supporting Information Sources)*** | ***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 storm water drainage, electric power, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? |  |  |  |  |
| b) Have sufficient water supplies available to serve the project and responsibly foreseeable future development during normal, dry and multiple dry years? |  |  |  |  |
| 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? |  |  |  |  |
| 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? |  |  |  |  |
| e) Comply with federal, State, and local management and reduction statutes and regulations related to solid waste? |  |  |  |  |

This impact analysis presented in this section is informed, in part, by the Utilities Memorandum provided in **Appendix I** of this IS/MND.

##### Discussion

a) Water

Construction

During construction activities, there would be a temporary, intermittent demand for water for such activities as soil watering for site preparation, fugitive dust control, concrete preparation, painting, cleanup, and other short-term activities. Construction-related water usage is not expected to have an adverse impact on available water supplies, and impacts would be less than significant.

As detailed in the Utilities Memorandum, the proposed project would require the installation of water distribution lines and minor work associated with lateral connections to the public water main. Project contractors would be required to coordinate with Cal Water Dominguez District and the County of Los Angeles prior to construction. Ground disturbance associated with the expansion of these water distribution lines is analyzed throughout this environmental document. With implementation of mitigation measures within this document, construction impacts associated with the proposed expanded water lines would be less than significant.

Operation

No new sources of water supply, such as groundwater, are required to meet the proposed project’s water demand. Potable water would be supplied by the Cal Water Dominguez District. Based on the 2020 Urban Water Management Plan (UWMP), the Cal Water Dominguez District receives its water from 17 percent groundwater, 15 percent recycled water, and 68 percent purchased water (California Water Service 2020).

While the self-storage facilities would not contain any water fixtures, the proposed retail uses and landscaping would contribute to the proposed project’s operational water demand. As detailed in the Utilities Memorandum, the total water demand generated by the proposed project would be 1.85 acre-feet per year (AFY). However, as fire water demand will create a much greater immediate impact on the water network as compared to the proposed project’s domestic uses, the primary means for analyzing infrastructure capacity is based on fire water demand. As further described in the Utilities Memorandum, Furthermore, a regional fire Hydrant Flow Test was performed by Cal Water for the existing hydrant on the west side of Perry Street, within the immediate vicinity of the project site, which confirms the available pressure and capacity of the existing fire hydrant is sufficient (refer to **Appendix I** of this IS/MND). Furthermore, Cal Water has confirmed that adequate water services are available to serve the proposed project from existing commitments (refer to **Appendix I** of this IS/MND). Therefore, operation-related water usage would not have an adverse impact on available water supplies, and impacts would be less than significant.

###### Wastewater Treatment

Construction

Construction activities for the proposed project would not result in wastewater generation as construction workers would utilize portable restrooms, which would not contribute to wastewater flows to the local wastewater system. Therefore, no impact would occur related to wastewater treatment generation during construction.

As detailed in the Utilities Memorandum, the proposed project would require construction of new wastewater infrastructure to serve the proposed buildings, consisting of minor work to connect to the public sewer main. Ground disturbance associated with the expansion of these sewer lines is analyzed throughout this environmental document. With implementation of mitigation measures within this document, construction impacts associated with the proposed expanded sewer lines would be less than significant.

Operation

The Los Angeles County Sanitation Districts (LACSD) provide wastewater treatment for much of Los Angeles County including the project site. LACSD has confirmed service to the project site via a will serve letter provided in **Appendix I** of this IS/MND. Wastewater generated by the proposed project would be treated at the LACSD’s Joint Water Pollution Control Plant (JWPCP) located in the City of Carson, which has a capacity of 400 million gallons per day (mgd) and currently processes an average flow of 261.1 mgd (LACSD 2008). The capacity of this facility is limited to levels associated with approved growth identified by the SCAG. In addition, payment of a standard sewer connection fee and ongoing user fees would be required to ensure that sufficient capacity is available.

As detailed in the Utilities Memorandum, the proposed project would contribute 12,250 gallons per day (GPD) of wastewater, which is a negligible wastewater generation compared to the available capacity at the JWPCP. In addition, payment of standard sewer connection fees and ongoing user fees would ensure that sufficient capacity is available. Therefore, it is not anticipated that project implementation would require construction of new or the expansion of existing wastewater facilities and impacts would be less than significant.

###### Stormwater

As discussed above in Section X, Hydrology and Water Quality, the project site drains towards the west to an existing 5-foot storm drain inlet that outlets directly to the Dominguez Channel. Under the proposed project, the project site would drain from east to west via gutters that wrap around the proposed buildings. The runoff generated would be treated by a 10 foot by 20-foot Modular Wetland System that would discharge via an 18-inch pipe to the existing 5-foot storm drain inlet, as under existing conditions In addition, the proposed project would be required to complete a SWPPP in accordance with the NPDES, which would reduce the potential for stormwater impacts on- and off-site. Furthermore, once implementation of the proposed project is complete, the project site would contain approximately 10.2 percent landscaped areas. Therefore, impacts related to stormwater drainage would be less than significant.

###### Electric Power, Natural Gas, and Telecommunications

The project site is located in an urbanized area of the City of Carson and is currently vacant and undeveloped. The project site was previously developed and historically served by electric power, natural gas, and telecommunications providers that still exist in the vicinity of the project site. With regard to existing electrical distribution lines, the proposed project would be required to coordinate electrical infrastructure removals or relocations with SCE and comply with site-specific requirements set forth by SCE, which would ensure that service disruptions and potential impacts associated with grading, construction, and development within SCE easements would be minimized. As described in the Utilities Memorandum, development of the proposed project would require the construction of a transformer pad. In addition, the proposed project would also be required to coordinate with SoCalGas to identify the locations and depth of all existing gas lines and avoid disruption of gas service to other properties. Furthermore, the proposed project would implement any necessary connections and upgrades required by SoCalGas to ensure that SoCalGas would be able to adequately serve the proposed project. With regard to telecommunication, the proposed project would be required to coordinate with AT&T to connect services to the project site. Specifically, a tie in overhead at the existing overhead line on East Carson Street would be required. Well serve letters from these utilities are provided in **Appendix I** of this IS/MND. Implementation of the proposed project would not require the extension of or new electric power, natural gas, and telecommunication infrastructure and there would be no impact.

b) The proposed project would have sufficient water supplies available to serve the project site and responsibly foreseeable future development during normal, dry and multiple dry years. As detailed above in Section XIX (a) and as detailed in the Utilities Memorandum, the total water demand for the proposed project would be 1.85 AFY Cal Water has confirmed that adequate water services are available to serve the proposed project from existing commitments (refer to **Appendix I** of this IS/MND). Therefore, water usage would not have an adverse impact on available water supplies, and impacts would be less than significant.

c) The JWPCP serves the project site and the capacity of this facility is limited to levels associated with approved growth identified by the SCAG. As discussed above in response to Section XIX (a), the proposed project would contribute 12,250 GPD of wastewater, which is a negligible increase compared to the available capacity of 138.9 mgd at the JWPCP.[[8]](#footnote-9) In addition, payment of standard sewer connection fees and ongoing user fees would ensure that sufficient capacity is available. Therefore, a less-than-significant impact would occur.

d) A substantial amount of solid waste is disposed of throughout the region, requiring ongoing landfill expansions. According to the City of Carson General Plan, solid waste generated by industrial, commercial, and residential uses in the City is collected by Waste Management. Waste Management collects an estimated 153,500 tons from commercial and industrial customers per year. Solid waste collected by Waste Management is transported to the Carson Transfer Station and Materials Recovery where it is sorted by material type. The 10-acre facility has a permitted capacity of 5,300 tons per day. Once the materials have been sorted, tires, green waste, steel, and wood are diverted to special facilities for disposal and recycling. Excess solid waste is sent to El Sobrante Landfill in Riverside County, approximately 75 miles from the City. Waste Management also disposes solid waste to Lancaster Landfill and Simi Valley Landfill as alternates. The total permitted throughput for all landfills is 30,404 tons per day, and approximately 249 million cubic yards of capacity remain (CalRecycle 2022). As under existing conditions, solid waste would be collected by Waste Management and taken to the appropriate Sanitation Districts of Los Angeles County landfill with remaining capacity. Landfills operated by Sanitation Districts of Los Angeles County are subject to federal and State programs that regulate operations and capacity in consideration of solid waste reduction goals.

In addition, according to the 2021 Annual Report for the Countywide Integrated Waste Management Plan (CIWMP), the remaining capacity at County-operated landfills is 129.19 million tons (County of Los Angeles 2021). Construction of the proposed project would generate solid waste including wood, metals, soils, and other construction-related materials. However, as required by the Construction and Demolition Debris Recycling and Reuse Program (C&D) Program, the proposed project would be required to divert a minimum of 65 percent of C&D waste from landfills. As the proposed project would be required to divert 65 percent of solid waste from landfills, the remaining capacity of County-operated landfills would be minimally affected due to construction.

All collection, transportation, and disposal of any solid waste generated by the proposed project during construction and operation would comply with all applicable federal, State, and local statutes and regulations. In particular, AB 939 requires that at least 50 percent of solid waste generated by a jurisdiction be diverted from landfill disposal through source reduction, recycling, or composting. Cities, counties, and regional agencies are required to develop a waste management plan that would achieve a 50 percent diversion from landfills (Public Resources Code Section 40000 et seq.). Furthermore, as required by existing regulations, any hazardous materials collected on the project site during demolition, construction, or operational activities would be transported and disposed of by a permitted and licensed hazardous materials service provider at a facility permitted to accept such hazardous materials. As such, the proposed project is not anticipated to 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. Therefore, this impact would be less than significant.

e) The project site is subject to State and City mandates with respect to solid waste, such as implementation of the City’s Diversion and Recycling Program. The proposed project would comply with all federal, State, and local statutes and regulations related to solid waste, including the California Integrated Waste Management Act and City requirements for solid waste generated during project construction and operation. Compliance with these regulations would ensure that a less-than-significant impact would occur.

#### XX. Wildfire

| ***Issues (and Supporting Information Sources)*** | ***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? |  |  |  |  |
| 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? |  |  |  |  |
| c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? |  |  |  |  |
| 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? |  |  |  |  |

##### Discussion

a) As noted previously, the project site is not within a Very High Fire Hazard Severity Zone. As analyzed in Section IX, *Hazards and Hazardous Materials*, above, while primary access to the project site would be provided from South Perry Street, vehicles travelling to the project site during construction or operation would do so via East Carson Street, a City designated evacuation route as identified in the Multi-Hazard Functional Plan for emergency response within the City (City of Carson 2004). During construction, East Carson Street may require temporary partial lane closures. The Applicant would be required to implement a traffic management plan, which would ensure that at least one lane remains open and emergency access is maintained during construction. In addition, the vehicle trips generated are not anticipated to impact emergency access provided from East Carson Street, and operations are not likely to interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, impacts related to impairing an emergency response or evacuation plan would be less than significant.

b) The project site is located in an urbanized area and would continue to be served by the LACFD. According to CAL FIRE, the proposed project is not located within a Very High Fire Hazard Severity Zone (CAL FIRE 2022). Therefore, the proposed project would not expose people to significant pollutant concentrations resulting from wildland fires, or the uncontrolled spread of a wildfire. Therefore, no impacts related to exacerbating wildfire risks due to slope, prevailing winds, and other factors would occur.

c) As described above, the proposed project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk. While the project site is currently vacant and undeveloped, the project site would connect to existing power lines and utilities already in the vicinity of the project site. As the proposed project would be constructed in compliance with the CBC and CFC, and given that the project site is not located in a Very High Fire Hazard Severity Zone (CAL FIRE 2022), project implementation would not exacerbate fire risks or result in ongoing environmental impacts. Therefore, no impacts related to exacerbating wildfire risks as a result of installation or maintenance of associated infrastructure would occur.

d) As described above, the project site is located in an urbanized area, and would continue to be served by the LACFD. Additionally, according to CAL FIRE, the project site is not located within a Very High Fire Hazard Severity Zone (CAL FIRE 2022). Given the local topographic and environmental characteristics of the project site, the proposed project would not increase the possibility of wildland fire in the project vicinity.

Additionally, no streams, rivers or natural drainages occur on the project site. Due to the relatively flat topography of the project site and surrounding area, the project site would not expose people or structures to flooding or potential landslides. Therefore, no impacts would occur related to exposing people or structures to significant risk.

#### XXI. Mandatory Findings of Significance

| ***Issues (and Supporting Information Sources)*** | ***Potentially Significant Impact*** | ***Less than Significant with Mitigation Incorporated*** | ***Less-than- Significant Impact*** | ***No Impact*** |
| --- | --- | --- | --- | --- |
| XXI. 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? |  |  |  |  |
| b) Does the project have impacts that are individually limited but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? |  |  |  |  |
| c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? |  |  |  |  |

##### Discussion

a) The proposed project is a self‐storage facility consisting of approximately 113,714 square feet in a mix of one‐ and two‐story buildings. As discussed in Section IV, *Biological Resources*, the proposed project does not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish and wildlife species, cause a fish, or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of rare or endangered plant or animals. As indicated in Section V, Cultural Resources, in the event that historical resources, archaeological resources, or human remains are encountered during construction, Mitigation Measures MM-CULT-1 and MM-CULT-2 would require all project construction activities to halt until qualified experts identify the significance of the find and recommend a course of action. Furthermore, to reduce impacts to tribal cultural resources, the proposed project would implement Mitigation Measure MM-TCR-1. Therefore, the proposed project would not potentially 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, 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. Therefore, a less-than-significant impact would occur with mitigation.

b) A significant impact may occur if the proposed project, in conjunction with the related projects, would result in impacts that are significant when taken together. With the incorporation of mitigation, the proposed project would have less-than-significant or no impacts with respect to all environmental topics, as discussed in the above checklist. Related projects would also be required to mitigate any impacts to the maximum extent feasible. Therefore, with mitigation incorporated, the proposed project together with related projects would not result in significant cumulative impacts.

c) A significant impact may occur if the proposed project has the potential to result in significant impacts, as discussed in the preceding sections. All potential impacts of the proposed project have been identified, and mitigation measures have been prescribed, where applicable, to reduce all potential impacts to less-than-significant levels. The proposed project would comply with all applicable permits, regulations, and other conditions imposed by the City of Carson and responsible agencies. Therefore, impacts associated with the proposed project would be less than significant.

# Chapter 4

## References

### Aesthetics

Caltrans (California Department of Transportation). 2021. California Scenic Highway Mapping System, List of Eligible and Officially Designated State Scenic Highways. <https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways>, accessed December 15, 2021.

City of Carson. 2002. City of Carson General Plan Environmental Impact Report. SCH No. 2001091120, October.

### Agriculture and Forestry Resources

California Department of Conservation, Division of Land Resource Protection. 2021. Farmland Mapping and Monitoring Program, Important Farmland Finder, <https://maps.conservation.ca.gov/DLRP/CIFF/>, accessed December 15, 2021.

CDC (California Department of Conservation, Division of Land Resources Protection). 2017. State of California Williamson Act Contract Land.

City of Carson. 2004. City of Carson General Plan, Land Use Element.

### Air Quality

CARB (California Air Resources Board). 2003. OFFROAD Modeling Change Technical Memo, revised June 13.

Fehr & Peers. 2022. 21611 South Perry Street Local Transportation Assessment. January 18.

OEHHA (Office of Environmental Health Hazard Assessment). 2015. Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments. [http://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0, accessed January 18, 2022](http://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0,%20accessed%20January%2018,%202022).

SCAG (Southern California Association of Governments). 2016. 2016–2040 Regional Transportation Program/Sustainable Communities Strategy – Demographics & Growth Forecast.

SCAQMD (South Coast Air Quality Management District). 2003a. 2003 AQMP, Appendix V: Modeling and Attainment Demonstrations, page V-4-24.

SCAQMD. 2003b. Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis, August 2003.

SCAQMD. 2008. Final Localized Significance Threshold Methodology. http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds, accessed December 15, 2021.

SCAQMD. 2015. Air Quality Significance Thresholds. http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2, accessed January 18, 2022.

SCAQMD. 2016. Final 2016 Air Quality Management Plan. https://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf?sfvrsn=15, accessed January 18, 2022.

### Biological Resources

CDFW (California Department of Fish and Wildlife). 2022. NCCP Plan Summaries, <https://www.wildlife.ca.gov/Conservation/Planning/NCCP/Plans>, accessed April 25, 2022.

### Energy

California Energy Commission. 2019. California Annual Retail Fuel Outlet Report Results (CEC-A15) Spreadsheets. <https://www.energy.ca.gov/data-reports/energy-almanac/transportation-energy/california-retail-fuel-outlet-annual-reporting>, accessed January 18, 2022.

California Gas and Electric Utilities. 2020. 2020 California Gas Report.

City of Carson. 2015. Energy Efficiency Climate Action Plan, December.

Clean Power Alliance. 2018. Member Agency Default Tier, November. <https://cleanpoweralliance.org/wp-content/uploads/2019/01/Clean-Power-Alliance-Member-Agency-Default-Tier-Choices.pdf>, accessed December 15, 2021.

Office of Planning and Research. 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA, December.

SCAG (Southern California Association of Governments). 2020. Connect SoCal: 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy, May 2020.

SCE (Southern California Edison). 2019. Edison International and Southern California Edison 2019 Annual Report.

USEPA (United States Environmental Protection Agency). 2011. Fact Sheet: EPA and NHTSA Adopt First-Ever Program to Reduce Greenhouse Gas Emissions and Improve Fuel Efficiency of Medium- and Heavy-Duty Vehicles, August.

USEPA. 2016. Federal Register/Vol. 81, No. 206/Tuesday, Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles—Phase 2, October 25.

### Geology and Soils

CGS (California Geological Survey). 2021. Earthquake Zones of Required Investigation – 21611 Perry Street, Carson, CA 90746. <https://maps.conservation.ca.gov/cgs/EQZApp/app/>, accessed January 18, 2022.

City of Carson. 2004. City of Carson General Plan, Safety Element.

City of Carson. 2002. City of Carson General Plan Environmental Impact Report. SCH No. 2001091120, October.

### Greenhouse Gas Emissions

CARB (California Air Resources Board). 2008. Climate Change Scoping Plan, December.

CARB. 2017. The 2017 Climate Change Scoping Plan Update – The Proposed Strategy for Achieving California’s 2030 Greenhouse Gas Target, January.

CARB. 2021a. California Greenhouse Gas Emissions for 2000-2019 Trends of Emissions and Other Indicators, July 28.

CARB. 2021b. Low Carbon Fuel Standard and Alternative Diesel Fuels Regulation 2018. <https://ww2.arb.ca.gov/rulemaking/2018/low-carbon-fuel-standard-and-alternative-diesel-fuels-regulation-2018>, accessed December 15, 2021.

CARB. 2021c. LCFS Regulation. <https://ww2.arb.ca.gov/our-work/programs/low-carbon-fuel-standard/lcfs-regulation>, accessed December 15, 2021.

City of Carson. 2015. Energy Efficiency Climate Action Plan, December.

Fehr & Peers. 2022. 21611 South Perry Street Local Transportation Assessment. January 18.

IPCC (Intergovernmental Panel on Climate Change). 2001. Climate Change 2001: Working Group I: The Scientific Basis, <https://www.ipcc.ch/report/ar3/wg1/>, accessed December 15, 2021.

SCAG (Southern California Association of Governments). 2020. Connect SoCal: 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy, May 2020.

SCAQMD (South Coast Air Quality Management District). 2008. Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold, October.

SCE (Southern California Edison). 2020. 2019 Power Content Label.

### Hazards and Hazardous Materials

CAL FIRE (California Department of Forestry and Fire Protection). 2022. FHSZ Viewer, https://egis.fire.ca.gov/FHSZ/, accessed April 25, 2022.

City of Carson. 2004. City of Carson General Plan, Safety Element.

Los Angeles County Airport Land Use Commission. 2004. Comprehensive Airport Land Use Plan, adopted 1991, revised 2004.

### Hydrology and Water Quality

California Water Service. 2020. 2020 Urban Water Management Plan Dominguez District, California Water Service, June.

City of Carson. 2004. City of Carson General Plan.

FEMA (Federal Emergency Management Agency). 2020. FIRMETTE for 21611 Perry Street, Carson, CA 90746, <https://hazardsfema.maps.arcgis.com/apps/webappviewer/index.html?id=8b0adb51996444‌d4879338b5529aa9cd&extent=-118.26116474264134,33.87484125518119,-118.2509938060566,33.8837484827554>, accessed December 15, 2021.

### Land Use

City of Carson. 2002. City of Carson General Plan Environmental Impact Report. SCH No. 2001091120, October.

City of Carson. 2004. City of Carson General Plan.

### Minerals

CDC (California Department of Conservation, Division of Mines and Geology). 2022. CGS Information Warehouse: Mineral Land Classification, <https://maps.conservation.ca.gov/cgs/informationwarehouse/mlc/>, accessed January 18, 2022.

City of Carson. 2004. City of Carson General Plan, Safety Element.

County of Los Angeles. 2015. Los Angeles County General Plan 2035, Figure 9.6, Mineral Resources.

### Noise

ASHRAE (America Society of Heating, Refrigerating and Air-Conditioning Engineers). 1999. Heating, Ventilating, and Air-Conditioning Applications.

Caltrans (California Department of Transportation). 2013a. Technical Noise Supplement to the Traffic Noise Analysis Protocol, September.

Caltrans. 2013b. Transportation and Construction Vibration Guidance Manual, September.

City of Carson. 2002. City of Carson General Plan. Noise Element.

City of Carson Municipal Code, Article 5, Chapter 5, Noise Control Ordinance. <https://www.codepublishing.com/CA/Carson/html/Carson05/Carson050500.html>, accessed January 18, 2022.

Fehr & Peers. 2022. 21611 South Perry Street Local Transportation Assessment. January 18.

FHWA (Federal Highway Administration). 2018. Techniques for Reviewing Noise Analyses and Associated Noise Reports, June 1.

FTA (Federal Transit Administration). 2006. Transit Noise and Vibration Impact Assessment, May.

Los Angeles County Municipal Code. 2022. Noise Control Ordinance, Title 12, Chapter 12.08. <https://library.municode.com/ca/los_angeles_county/codes/code_of_ordinances?nodeId=16274>, accessed April 25, 2022.

Office of Planning and Research. 2017. General Plan Guidelines.

### Population and Housing

SCAG (Southern California Association of Governments). 2020. Connect SoCal: 2020–2045 Regional Transportation Plan/Sustainable Communities Strategy, Demographics and Growth Forecast, May.

### Public Services

City of Carson. 2004. City of Carson General Plan.

LACFD (Los Angeles County Fire Department). 2022. Los Angeles County Fire Department – Station 127, https://locator.lacounty.gov/fire/Location/3069582/los-angeles-county-fire-department---station-127, accessed January 18, 2022.

LASD (Los Angeles County Sheriff’s Department). 2022. Station Finder, <https://lasd.org/stations/>, accessed April 25, 2022.

### Transportation

City of Carson. 2013. Carson Master Plan of Bikeways, August.

City of Carson. 2004. City of Carson General Plan, Chapter 4 Transportation and Infrastructure Element.

Metro (Los Angeles Metropolitan Transportation Authority). 2016. Active Transportation Strategic Plan.

Fehr & Peers. 2022. 21611 South Perry Street Local Transportation Assessment, January 18.

Office of Planning and Research. 2018. Technical Advisory on Evaluating Transportation Impacts in CEQA, December.

### Utilities and Service Systems

CalRecycle (California Department of Resources Recycling and Recovery). 2022. SWIS Facility/Site Data Exports, <https://www2.calrecycle.ca.gov/SolidWaste/Site/DataExport>, accessed April 25, 2022.

California Water Service. 2020. 2020 Urban Water Management Plan Dominguez District, California Water Service, June.

County of Los Angeles. 2020. 2019 Annual Report – Los Angeles County Countywide Integrated Waste Management Plan, September.

LACSD (Los Angeles County Sanitation Districts). 2022. Wastewater Treatment Process at JWPCP, [www.lacsd.org/services/wastewater-sewage/facilities/joint-water-pollution-control-plant/wastewater-treatment-process-at-jwpcp](http://www.lacsd.org/services/wastewater-sewage/facilities/joint-water-pollution-control-plant/wastewater-treatment-process-at-jwpcp), accessed April 25, 2022.

### Wildfire

CAL FIRE (California Department of Forestry and Fire Protection). 2022. FHSZ Viewer, https://egis.fire.ca.gov/FHSZ/, accessed April 25, 2022.

City of Carson. 2004. City of Carson General Plan, Safety Element.

City of Carson. 2002. City of Carson General Plan Environmental Impact Report. SCH No. 2001091120, October.

1. The most recent version of the AQMP (2016 AQMD) is based on the 2016-2040 RTP/SCS and will therefore rely on the 2016-2040 RTP/SCS when discussing plan consistency. [↑](#footnote-ref-2)
2. The Los Angeles County portion of the Basin is designated as nonattainment for the federal lead standard; however, this was due to localized emissions from two lead-acid battery recycling facilities in the City of Vernon and the City of Industry that are no longer operating. For reference refer to South Coast Air Quality Management District, Board Meeting, Agenda No. 30, Adopt the 2012 Lead State Implementation Plan for Los Angeles County, May 4, 2012. [↑](#footnote-ref-3)
3. SCAQMD’s Localized Significance Threshold Methodology (refer to page 3-3) states for project boundaries located closer than 25 meters (82 feet) to the nearest receptor, such as the proposed project where the nearest receptors are located approximately 50 feet to the north of the project site, should use the LSTs for receptors located at 25 meters. [↑](#footnote-ref-4)
4. The most recent year that SCE data was available. [↑](#footnote-ref-5)
5. For the purposes of estimating energy demand, the analysis conservatively assumes the proposed project would not switch electricity providers from SCE to the CPA (i.e., does not take any credit for 36 percent, 50 percent, or 100 percent renewable electricity, depending on the selected CPA plan). Should the proposed project switch electricity providers from SCE to the CPA, the proposed project’s electricity-related emissions would be lower than those disclosed in this section. [↑](#footnote-ref-6)
6. A metric ton is 1,000 kilograms; it is equal to approximately 1.1 U.S. tons and approximately 2,204.6 pounds. [↑](#footnote-ref-7)
7. Noise from a localized source (i.e., point source) propagates uniformly outward in a spherical pattern, referred to as “spherical spreading.” Stationary point sources of noise, including stationary mobile sources such as idling vehicles, attenuate (i.e., reduce) at a rate between 6 dBA for acoustically “hard” sites for each doubling of distance from the reference measurement, Caltrans, Technical Noise Supplement, September, 2013. [↑](#footnote-ref-8)
8. Available capacity derived from the total capacity of 400 million mgd subtracted by 261.1 mgd average flow currently processed at the JWPCP. [↑](#footnote-ref-9)