Initial Study/Draft Mitigated Negative Declaration

Former Navy Property Restoration Project

MARCH 2023

Prepared for:

THE PORT OF HUENEME OXNARD HARBOR DISTRICT

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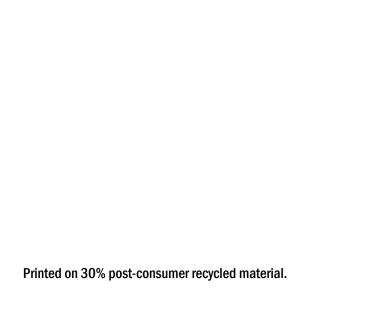


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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
AB	Assembly Bill
ACBM	Asbestos Containing Building Materials
AQMP	Air Quality Management Plan
BMPs	Best Management Practices
CAAQS	California Ambient Air Quality Standards
CAL Fire	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCR	California ode of Regulations
CDOC	California Department of Conservation
CDFW	California Department of Fish and Wildlife
CDP	Coastal Development Permit
CEQA	California Environmental Quality Act
СО	Carbon Monoxide
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide equivalent
DPM	Diesel Particulate Matter
DTSC	Department of Toxic Substance Control
EIR	Environmental Impact Report
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
GHG	Greenhouse Gasses
GWP	Global Warming Potential
IS	Initial Study
LBP	Lead Based Paint
LUST	Leaking Underground Storage Tank
MND	Mitigated Negative Declaration
MT	Metric tons
NOI	Notice of Intent
N ₂ O	Nitrous oxide
NOx	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
03	Ozone
PHPD	Port Hueneme Police Department
PM ₁₀	Particulate Matter smaller than 10 microns in size
PM _{2.5}	Particulate Matter smaller than 2.5 microns in size
PRC	Public Resource Code

Acronym/Abbreviation	Definition
RTP	Regional Transportation Plan
SB	Senate Bill
SCAG	Sothern California Association of Governments
SCCAB	South Central Coast Air Basin
SCS	Sustainable Communities Strategy
SO _x	Sulphur Oxides
SWPPP	Storm Water Pollution Prevention Plan
TAC	Toxic Air Pollutants
USFWS	US Fish and Wildlife Service
VCAPCD	Ventura County Air Pollution Control District
VCFPD	Ventura County Fire Protection District
VMT	Vehicle Miles Travelled
VOC	Volatile Organic Compounds

ES Executive Summary

ES.1 Project Overview

The Port of Hueneme Oxnard Harbor District (District), as the lead agency under the California Environmental Quality Act (CEQA), has prepared this Initial Study/Draft Mitigated Negative Declaration (IS/Draft MND) to evaluate potential environmental effects of the Former Navy Property Restoration Project (project).

Project Location

The project site is located on approximately 2-acres of developed land that was formerly part of the light station grouping of properties at the southwest end of the District, east of the main channel adjacent to Lighthouse Promenade in the City of Port Hueneme, CA 93041. The project site contains existing buildings 400, 404, 406, 408, 416, 422, and 428 along with existing landscaping and ancillary structures.

Project Description

The project would demolish seven existing buildings, formerly used by the Navy that can no longer be used and are in a derelict state, in a location that removal of these buildings would allow for use as open backlands for increased flexibility and efficiency of ongoing port operations now, such as temporary storage for goods moving through the port, including vehicles, refrigerated containers, fresh fruit, and bulk liquids, as well as temporary storage of truck trailers and drayage trucks. While not a part of this project, the demolition of buildings would reduce the barriers to ostensible future development of aquaculture operations. The site would continue with Port-Related Uses that would not exclude aquaculture use and/or cargo related uses. The project would demolish a total of approximately 37,500 square feet of developed impervious areas. The proposed disturbance footprint is anticipated to be approximately 1.7 acres and an area of approximately 1.5 acres would be graded and paved after demolition. Demolition, grading, and paving (collectively "construction") are expected to take approximately 120 days total. The District has identified that discretionary actions for the project include, but may not be limited to, a District issued Coastal Development Permit. Additional approvals for the project may include: a demolition permit from the City; a grading permit from the City; and a general construction permit from the State Water Resources Control Board.

ES.2 CEQA Compliance

CEQA, a statewide environmental law contained in California Public Resources Code (PRC) Sections 21000–21177, applies to most public agency decisions to carry out, authorize, or approve actions that have the potential to adversely affect the environment (PRC Section 21000 et seq.). The overarching goal of CEQA is to protect the physical environment. To achieve that goal, CEQA requires that public agencies identify the environmental consequences of their discretionary actions and consider alternatives and mitigation measures that could avoid or reduce significant adverse impacts when avoidance or reduction is feasible. It also gives other public agencies and the public an opportunity to comment on the project. If significant adverse impacts cannot be avoided, reduced, or mitigated to below a level of significance, the public agency is required to prepare an environmental impact report (EIR) and balance the project's environmental concerns with other goals and benefits in a statement of overriding considerations.

This document has been prepared in accordance with CEQA (Public Resources Code Section 21000 et seq.), the State CEQA Guidelines (California Code of Regulations Section 15000 et seq.). Specifically, this document meets

the requirements of CEQA Guidelines Sections 15070 and 15071, and the environmental checklist (Chapter 3) meets the requirements of CEQA Guidelines Section 15063. An initial study is prepared by a lead agency to determine if a project may have a significant effect on the environment (State CEQA Guidelines Section 15063[a]), and thus to determine the appropriate environmental document. In accordance with State CEQA Guidelines Section 15070, a "public agency shall prepare...a proposed negative declaration or mitigated negative declaration...when: (a) The Initial Study shows that there is no substantial evidence...that the project may have a significant impact on the environment, or (b) The Initial Study identifies potentially significant effects but revisions to the project plans or proposal are agreed to by the applicant and such revisions would reduce potentially significant effects to a less-than-significant level." In this circumstance, the lead agency prepares a written statement describing its reasons for concluding that the project would not have a significant effect on the environment and, therefore, does not require the preparation of an environmental impact report (EIR). By contrast, an EIR is required when the project may have a significant environmental impact that cannot clearly be reduced to a less-than-significant effect by adoption of mitigation or by revisions in the project design. The Initial Study (IS) in this instance identifies that implementation of the project would not result in significant impacts with the incorporation of mitigation.

ES.3 Findings

Chapter 3 of this document contains the analysis and discussion of potential environmental impacts of the project.

Based on the issues evaluated in that chapter, it was determined that the project would have either no impact or a less-than-significant impact related to the following issue areas: aesthetics, agriculture and forest resources; air quality; cultural resources; energy; greenhouse gas emissions; geology and soils; hydrology and water quality; land use and planning; mineral resources; noise; population and housing; public services; recreation; transportation; tribal cultural resources; utilities and service systems; and wildfire. Potentially significant impacts were identified for biological resources and hazards and hazardous materials; however, mitigation measures included in the Draft IS/ MND would reduce the impacts to less-than-significant levels.

ES.4 Mitigation Measures

To reduce the impacts to below the level of significance for impacts to biological and cultural resources and hazards and hazardous materials the following mitigation measures will be implemented:

BIO -1: If demolition work must occur during the nesting bird season (February 1 through August 31), a pre-activity nesting bird survey will be conducted to determine if active nests are present within or adjacent to the work area. Specifically, prior to any demolition activity, surveys for active nests will be conducted by a qualified ornithologist within 300 feet of the project site and no more than 7 days prior to the start of activities in order to identify any nests that are present and to determine their status. The survey and no disturbance buffer will be established in coordination with the CDFW and USFWS (as a portion of the area to survey includes the beach, which is federally designated critical habitat for snowy plover). If active nests are found a minimum no disturbance buffer of 100 feet for non-listed bird species and 300 feet for state- or federally-listed bird species will be maintained until the breeding season has ended, or until the biologist determines that the birds have fledged and are no longer reliant upon the nest or parental care for survival. The minimum

buffer set by USFWS or CDFW will be maintained for identified nests of any listed species. Any

variance from these buffers will be supported by the biologist and agencies should be notified in advance of implementation of a no disturbance buffer variance. Results of the surveys should be provided to CDFW and USFWS.

BIO-2:

If construction activities occur during the bat breeding/pupping season (April to September), an emergence survey for bats will be performed to determine the potential for all of the buildings to support maternity roosts. The surveys would include an inspection of the inside of the structures for roosting bats and sign of roosting bats (urine staining, guano) and active acoustic monitoring for bats emerging from the structures at and following dusk. The active acoustic survey would require the presence of up to two biologists observing the buildings for emerging bats at dusk and equipped with acoustic recording devices that record bat vocalizations. Recordings will be analyzed using specialized software following the survey, to determine which bats are present and their potential for using the structures for maternity roosts. In addition, several days of passive acoustic monitoring, and analysis of the recordings collected, will be conducted to gather data on bat presence over a longer period. Passive monitoring involves the deployment of unattended and secured devices over at least 3 nights or longer. All survey results, including field data sheets, will be provided to the California Department of Fish and Wildlife (CDFW). Locations of all roosts will be kept confidential to protect them from disturbance. If potential roosts are determined to be present then the roosts must be analyzed further to determine the species present and if maternity roosts are present. If maternity roosts of any bat species are present, the CDFW will be notified and no work will occur within 100 feet of the roost location of any bat species until the end of the pupping season.

CUL-1

Cultural Resource Treatment Plan. The applicant/owner/developer shall retain a Principal Investigator/Archaeologist, meeting the Secretary of Interior Standards and who has a minimum of 2 years' experience with prehistoric and historic resources within Southern California (preferably within the local area), to assess information available (final grading and construction plans, geotechnical testing results, as-built plans, etc.) and determine the depth at which native soils exist and would be impacted by Project implementation. The depth of native soils shall be included in the Plan to guide cultural assessment and monitoring efforts. Impacts to cultural resources shall be minimized through implementation of pre- and post- construction tasks. Tasks pertaining to cultural resources include the development of a cultural resource treatment plan (Plan). The purpose of the Plan is 1) to identify whether native soils will be impacted by project implementation; 2) design an appropriate monitoring program based on the nature of soils that will be impacted; 3) to advise construction personnel in the identification and proper response to an inadvertent discovery of cultural resources; 4) in the case that cultural resources are identified, provide a work plan to properly assess, evaluate, and treat those resources in accordance with state and local guidelines.

Prior to commencement of construction activities, a Worker Environmental Awareness Program (WEAP) shall be submitted by the Principal Investigator/Archaeologist to the District for review and approval. All construction personnel and monitors who are not trained archaeologists shall be briefed regarding inadvertent discoveries prior to the start of construction activities through implementation of the WEAP training. The WEAP training shall provide: 1) specific details on the kinds of archaeological materials and tribal cultural resources that may be identified during construction of the project; 2) explanation of the importance of and legal basis for the protection of significant archaeological resources; 3) the proper procedures to follow in the event that cultural resources, tribal cultural resources or human remains are uncovered during ground-disturbing activities. Existence and importance of adherence to

this Plan as well as the WEAP training shall be stated on all project site plans intended for use by those conducting the ground disturbing activities.

CUL-2

(Conditional Measure) Supplemental Archaeological Pedestrian Survey. If it is determined that project implementation will extend into native soils, the following measure shall be necessary. Once pavement and fill soils have been removed, a supplemental archaeological pedestrian survey shall be conducted by a Principal Investigator/Archaeologist (as defined in CUL-1) or their assigned representative, an archaeologist/s overseen by the Principal Investigator/Archaeologist. If cultural material/s is observed in native soil after the removal of fill soils, an Extended Phase I Archaeological Investigation shall be conducted by the Principal Investigator/Archaeologist to delineate the absence/presence of cultural material's both vertically and horizontally within the project site. Following the investigation and any subsequent testing or evaluation in accordance with CEQA the Principal Investigator/Archaeologist conducting the investigation shall provide the findings of significance pursuant to CEQA. If the resource/s is found to meet the criteria of a significant or unique archaeological resource pursuant to CEQA, the Principal Investigator/ Archaeologist shall make recommendations for avoidance of the significant resource/s in accordance with CEOA requirements. If avoidance is determined not feasible pursuant to CEOA, the Principal Investigator/Archaeologist shall provide the District with appropriate mitigation of the resource/s in accordance with CEOA which, depending on the nature of the impact to the resource. may include data recovery conducted according to professional standards as outlined in Office of Historic Preservation Guidelines for Archaeological Research Designs. Likewise, if the resource/s is determined to not be a significant or unique archaeological resource, the Principal Investigator/Archaeologist may provide the District with treatment and protocols in addition to CUL-3; otherwise, CUL-3 will continue to be required regardless of the outcome of investigation.

CUL-3

Archaeological Monitoring. An archaeological technician/monitor, under the direction of the Principal Investigator/Archaeologist (as defined in CUL-1), shall be retained to observe ground disturbing activities and respond to and address any inadvertent discoveries identified during initial excavation in native soils. Initial excavation is defined as initial construction-related earth moving of sediments from their place of deposition. As it pertains to archaeological monitoring, this definition excludes movement of sediments after they have been initially disturbed or displaced by project-related construction. A Principal Investigator/Archaeologist shall oversee and establish monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter cultural deposits or material. The archaeological monitor shall be responsible for maintaining daily monitoring logs. Upon completion of all ground disturbing activities, an archaeological monitoring report shall be prepared within 60 days following completion of ground disturbance and submitted to the District for review. This report shall document compliance with approved mitigation, all conducted monitoring efforts, and include an appendix with daily monitoring logs. The final report shall be submitted to the District and the SCCIC.

Inadvertent Discovery Clause. The following clause shall be included in the Cultural Resource Treatment Plan. In the event that potential prehistoric or historic-era archaeological resources and/or tribal cultural resources (sites, features, or artifacts) are exposed during construction activities for the project, all construction work occurring not less than 50 feet of the find shall immediately stop and the Principal Investigator/Archaeologist must be notified immediately to

assess of the discovery and determine whether additional study is warranted. Depending upon the nature of the discovery, the Principal Investigator/Archaeologist may simply record the find and allow work to continue. If the discovery proves potentially significant under CEQA, additional tasks as outlined in CUL-2 shall be required. If the discovery is determined significant under CEQA and avoidance is not feasible, data recovery shall be required. If Native American resources are discovered or are suspected, each of the consulting tribes for the project shall also be notified pursuant to TCR-1.

HAZ-1: Soil samples shall be collected throughout the site and analyzed for potential contaminants of concern including total petroleum hydrocarbons, VOCs, and total metals.

A hazardous materials contingency plan shall be followed during demolition, excavation, and grading activities for the proposed project. The hazardous materials contingency plan shall include, at a minimum, the following:

- Identification of suspected areas with hazardous waste and/or hazardous materials of concern
- Procedures for temporary cessation of construction activity and evaluation of the level of environmental concern
- Procedures for restricting access to the contaminated area except for properly trained personnel
- Procedures for notification and reporting, including internal management and local agencies (e.g., Ventura County Fire Protection District), as needed
- Health and safety measures for removal and excavation of contaminated soil, if discovered
- Procedures for characterizing and managing excavated soils
- Procedures for certification of completion of remediation
- Regulatory considerations
- Worker health and safety plan for management of contaminated materials
- Site workers shall be familiar with the hazardous materials contingency plan and should be fully trained on how to identify suspected contaminated soil.

HAZ-2: To determine if LBP and ACBM are present in the onsite structures, an LBP and ACBM survey should be conducted.

Asbestos Containing Materials (ABCM): Prior to the start of demolition, an asbestos survey shall be performed by the County of Ventura (County) Department of Environmental Health (DEH), Occupational Health Program (OHP) for all on-site structures that will be demolished. The survey shall cover the entirety of buildings to be demolished, document the location and types of asbestos found, if found, and determine whether any on-site abatement of asbestos-containing materials is necessary. If asbestos is located during the survey, an abatement work plan shall be prepared by the District and approved by County DEH in compliance with local, state, and federal regulations for removal of such materials. The work plan shall include specifications for the proper removal and disposal of asbestos. The County DEH, OHP, or its designee will monitor project applicant's implementation of the asbestos work plan to ensure that proper controls are implemented and to ensure compliance with the work plan requirements and abatement contractor specifications. Any necessary asbestos sampling and abatement shall be done by a California Occupational Safety

and Health Administration (Cal/OSHA)-certified asbestos consultant/contractor and all costs associated with such sampling and abatement shall be paid for by the District.

In addition, the District shall comply with all Ventura County Air Pollution Control District and Cal/OSHA notification requirements pertaining to the disturbance of asbestos-containing materials. When applicable, the District shall make these notifications prior to the activity as follows:

- a. 10-day notification to the Ventura County Air Pollution Control District for renovation/demolition activities. (Note: These are 10 working days; asbestos activities can start on the 11th day. Working days means Monday through Friday, including holidays that fall on these days.)
- b. 24-hour notification to Cal/OSHA.

Lead Based Paint (LBP): Prior to the start of demolition, a lead-based-paint survey shall be performed by a Certified Lead Inspector/Assessor as defined in Title 17, California Code of Regulations, Section 35005, for all on-site structures that will be disturbed by demolition activities in accordance with local, state, and federal regulations. The survey shall cover the entire building to be demolished, document the location and types of lead-based paint found, and determine whether any on-site abatement of lead-based paint is necessary. If lead-based paint is located during the survey, an abatement work plan shall be prepared by the County DEH in compliance with local, state, and federal regulations for any necessary removal of such materials. The work plan shall include specifications for the proper removal and disposal of lead-based paint. The District shall implement the work plan and shall be responsible for payment of all fees and costs associated with preparation and implementation of the work plan. The County DEH, OHP, or its designee will monitor implementation of the lead-based paint work plan to ensure that proper controls are implemented and to ensure compliance with the work plan requirements and abatement contractor specifications.

The District shall retain a California-licensed lead-based-paint abatement contractor, approved by the Count DEH, for the removal work and proper removal methodology as outlined by Cal/OSHA (8 CCR 1529), and all other applicable federal, state, and local regulations regarding the removal, transport, and disposal of lead-containing material shall be applied. The lead-based-paint abatement work plan shall include a monitoring plan to be conducted by a qualified consultant during abatement activities to ensure compliance with the work plan requirements and abatement contractor specifications. The work plan shall include provisions for construction worker training, worker protection, and conducting exposure assessments as needed. As part of the work plan, construction contractors shall consult federal OSHA regulations (29 CFR 1926.62) and Cal/OSHA regulations (8 CCR 1532.1) regarding lead in construction standards for complete requirements.

TCR-1. Native American Monitoring. Prior to ground disturbance activities, the Applicant and/or subsequent responsible parties shall retain a Native American/Tribal monitor/entity selected from the list of California Native American Tribes (maintained by the NAHC) and that are traditionally and culturally affiliated with the geographic area of the project site. The Applicant and/or subsequent responsible parties shall make arrangements with the Native American/Tribal monitor/entity to enter into a contract with the intent of securing a total of one Native American/Tribal monitor to be present during initial ground disturbance. Initial ground disturbance is defined as initial construction-related earthmoving of sediments from their place of deposition. As it pertains to

cultural resource (archaeological or Native American/Tribal) monitoring, this definition excludes movement of sediments after they have been initially disturbed or displaced by current project-related construction. The Plan created in compliance with CUL-1 shall be provided to the Native American/Tribal monitor/entity under contract prior to commencement of ground disturbing activities. More than one monitor may be required if multiple areas within the project site are simultaneously exposed to initial ground disturbance causing monitoring to be hindered by the distance (more than 200 feet apart) of the simultaneous activities.

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1 Introduction

1.1 Purpose of this Document

The purpose of this document is to present to decision-makers and the public information about the environmental consequences of the project. This document provides the District, as the lead agency under CEQA, with an evaluation of the potential environmental effects of the Former Navy Property Restoration Project (project), which involves the demolition of seven buildings and re-grading the project site of approximately 2-ares for use as backlands for port operations. As described in the IS (Chapter 3), the project would not result in any unmitigated significant environmental impacts. Therefore, an IS/Draft MND is the appropriate document for compliance with the requirements of CEQA. This IS/Draft MND conforms to these requirements and to the content requirements of State CEQA Guidelines Section 15071.

This IS/Draft MND is available to the public for review and comment for a 30-day public review period from March 29, 2023 to April 28, 2023.

Supporting documentation referenced in this document is available for review at:

The Port Of Hueneme
Oxnard Harbor District
333 Ponoma Street
Port Hueneme, California 93041

Comments should be addressed to:

KJ May
Port of Hueneme, Oxnard Harbor District
333 Ponoma Street
PO Box 608
Port Hueneme, California 93044

E-mail comments may be addressed to: ceqa@portofh.org

Written comments (including via e-mail) should be postmarked April 28, 2023.

After comments are received from the public and reviewing agencies, the District may (1) adopt the MND and approve the project; (2) undertake additional environmental studies; or (3) abandon the project.

1.2 Document Organization

This IS/Draft MND is organized as follows:

Chapter 1: Introduction. This chapter describes the purpose and organization of this document as well as an introduction to the environmental review process.

Chapter 2: Project Summary. This chapter provides the location of the project, a description of the project, a summary of the findings, and identifies approvals needed for the project.

Chapter 3: Initial Study / Environmental Checklist. This chapter presents an analysis of the environmental issues identified in the CEQA Guidelines Appendix G, Environmental Checklist and determines if the project would result in no impact, a less-than-significant impact, a less-than-significant impact with mitigation incorporated, or a potentially significant impact. If any impacts were determined to be potentially significant after implementation of mitigation measures.

Chapter 4: References and List of Preparers. This chapter identifies the references used in preparation of this IS/Draft MND and lists report preparers.

1.3 Public Review Process

Once the lead agency releases the NOI and the IS/Draft MND, the public has 30 days to provide the lead agency with written comments (CEQA Guidelines Section 15073(a)). During the 30-day review period. The written comments received on the IS/Draft MND during the public comment period will be considered and included in the IS/Final MND.

2 Project Summary

2.1 Project Location

The project site is located on approximately 2-acres of developed land that was formerly part of the light station and former navy properties at the southwest end of the District's jurisdiction, on the east side of the main channel adjacent to Lighthouse Promenade in the City of Port Hueneme, CA 93041 (see Figure 1 Project Location). The project site contains existing buildings 400, 404, 406, 408, 416, 422, and 428 along with existing landscaping and ancillary structures (see Figure 2 Project Site).

2.2 Project Description

The proposed disturbance footprint is anticipated to be approximately 1.7 acres and an area of approximately 1.5 acres would be graded and paved after demolition. Demolition, grading, and paving ("construction") are expected to take approximately 90 days total.

The project would demolish seven (7) buildings, as well as removal of landscaping and support structures on an approximately 1.7-acre area (see Figure 2, Project Site). The demolition would be followed by grading and paving to allow for open backlands space offering increased flexibility and efficiency of ongoing port operations now, such as temporary storage for goods moving through the port, including vehicles, refrigerated containers, fresh fruit, and bulk liquids, as well as temporary storage of truck trailers and drayage trucks. Total duration of demolition and construction activities is estimated at approximately 120 days, and construction activities would occur 8 hours each day, 6 days each week (Monday – Saturday, excluding holidays).

Project Demolition

The project would demolish a total of approximately 37,500 square feet of developed impervious areas. A total of seven (7) buildings, totaling approximately 11,000 square feet would be demolished. The square footage of each existing building to be demolished is as follows:

Building 400: 1,930.47 +/- square feet

Building 404: 2,944.2 +/- square feet

Building 406: 840.14 +/- square feet

Building 408: 1,342.50 +/- square feet

Building 416: 1,499.41 +/- square feet

Building 422: 938.02 +/- square feet

Building 428: 1,513.33 +/- square feet

In addition, approximately 37,514, square feet of existing impervious surfaces would be demolished.

Project Construction

Construction would involve site improvements, principally grading and paving an area of approximately 1.5 acres from which the seven buildings are demolished and removed. The demolition, removal of buildings, and level

grading of the site would allow for its use as open backlands with increased flexibility and efficiency of ongoing port operations, such as temporary storage for goods moving through the port, including vehicles, refrigerated containers, fresh fruit, and bulk liquids, as well as temporary storage of truck trailers and drayage trucks.

Post Construction Use

No new uses or increased capacity of use is proposed as part of this project, rather improved efficiency for existing backlands operations such as temporary storage of goods for unloading and loading, and temporary storage of vehicles. The project would enable the District to more efficiently process existing operations and market driven increases in goods movements through the port by providing flexible, open, backlands space. The site would continue with Port-Related Uses that would not exclude aquaculture use and/or cargo related uses.

2.3 Proposed Finding

This IS/Draft MND analyzes the environmental impacts of the project consistent with the format and analysis prompts provided in Appendix G of the CEQA Guidelines. The analysis identifies that the project would not result in potentially significant impacts associated with the following resource categories: aesthetics, agriculture, air quality, energy, geology and soils, greenhouse gas emissions, hydrology and water quality, land use and planning, mineral resources. noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, and wildfire. The analysis identifies that the project would not result in potentially significant impacts with mitigation incorporated for the following resource categories: biological resources, cultural resources, and hazards and hazardous materials.

2.4 Potential Permits and Approvals

The District has identified that discretionary actions for the project include, but may not be limited to, a District issued Coastal Development Permit.

Additional approvals for the project may include: a demolition permit from the City; a grading permit from the City; and a general construction permit from the State Water Resources Control Board.

3 Initial Study / Environmental Checklist

1. Project title:

Former Navy Property Restoration Project

2. Lead agency name and address:

The Port of Hueneme Oxnard Harbor District 333 Ponoma Street Port Hueneme, CA 93041

3. Contact person and phone number:

Christina Birdsey

4. Project location:

Regionally, the project site is located within the City of Port Hueneme (City) in the southwest portion of Ventura County (Figure 1, Project Location). Locally, the project site is located in the Oxnard Harbor District (District) on the east side of the Port of Hueneme harbor entrance (Figure 2, Project Site) (APN: 206-002-034).

5. Project sponsor's name and address:

The Port of Hueneme, Oxnard Harbor District.

6. General plan designation:

Port Master Plan designates the project site as Aquaculture / Fisheries / Navigation/ Marine Research & Education/Mixed Use Waterfront Complexes

The project site is designated as "Port" in the Port Hueneme Land Use Element of the General Plan

7. Zoning:

The project site is zoned as M-PR - Port Related Uses in the City's Zoning Code.

8. Description of project. (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary):

The project would demolish existing buildings that can no longer be used and are in a derelict state, in a location that removal of these buildings would allow for use as open backlands with increased flexibility and efficiency of ongoing port operations now, such as temporary storage for goods moving through the port, including vehicles, refrigerated containers, fresh fruit, and bulk liquids, as well as temporary storage of truck trailers and drayage trucks. The demolition of buildings would reduce the barriers to ostensible

future development of aquaculture operations, although this is not a part of the project nor are any known aquaculture activities or projects proposed at this site at this time. The site would continue with Port-Related Uses that would not exclude aquaculture use and/or cargo related uses. The project would demolish a total of approximately 37,500 square feet of developed impervious areas. The proposed disturbance footprint is anticipated to be approximately 1.7 acres and an area of approximately 1.5 acres would be graded and paved after demolition. The demolition, grading and paving is collectively referred to herein as construction, no construction of new buildings or otherwise raised appurtenances are proposed.

9. Surrounding land uses and setting (Briefly describe the project's surroundings):

The project site is bound to the north and east by existing District tenants' operations, the Lighthouse Promenade to the south, and the historic lighthouse to the west. The Pacific Ocean sits to the south and the main channel entrance to Port Hueneme to the west. Existing port tenants' operations involve temporary storage for goods moving through the port, including vehicles, refrigerated containers, fresh fruit, and bulk liquids. In addition, these areas are used for temporary storage of truck trailers and drayage trucks.

- 10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):
 - District, Coastal Development Permit
 - City of Port Hueneme, Demolition Permit
 - City of Port Hueneme, Grading Permit
 - State Water Resources Control Board, General construction permit
- 11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?

Refer to Section 3.18, Tribal Cultural Resources.

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 and Soils	Greenhouse Gas Emissions	Hazards and Hazardous Materials
Hydrology and Water Quality	Land Use and Planning	Mineral Resources

FORMER NAVY PROPERTY RESTORATION PROJECT INITIAL STUDY/DRAFT MITIGATED NEGATIVE DECLARATION

	Noise		Population and Housing		Public Services				
	Recreation		Transportation		Tribal Cultural Resources				
	Utilities and Service Systems		Wildfire		Mandatory Findings of Significance				
Deter	mination (To be completed	by ti	ne Lead Agency)						
n the	basis of this initial evaluation:								
	I find that the proposed project DECLARATION will be prepared.	COULE) NOT have a significant e	ffect o	n the environment, and a NEGATIVE				
X	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 I IMPACT REPORT is required.	MAY ha	ive a significant effect on t	the en	vironment, and an ENVIRONMENTAL				
	mitigated" impact on the environ document pursuant to applicab	ment, le lega s desc	but at least one effect (1) al standards, and (2) has ribed on attached sheets	has be been . An E	act" or "potentially significant unless een adequately analyzed in an earlier addressed by mitigation measures NVIRONMENTAL IMPACT REPORT is sed.				
	potentially significant effects (a REPORT or NEGATIVE DECLAR/ mitigated pursuant to that earlie) have ATION r ENVI	been analyzed adequate pursuant to applicable s RONMENTAL IMPACT REP	ely in a tanda ORT o	ect on the environment, because all an earlier ENVIRONMENTAL IMPACT rds, and (b) have been avoided or r NEGATIVE DECLARATION, including project, nothing further is required.				
Signa	Signature $\frac{3/27/2023}{Date}$								

 $\{b, \tilde{B} X_{\mathcal{F}}(b), \dots, p\}$

Evaluation of Environmental Impacts

- 1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an Environmental Impact Report (EIR) is required.
- 4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
- 5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - a. Earlier Analysis Used. Identify and state where they are available for review.
 - b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - c. Mitigation Measures. For effects that are "Less Than Significant With Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9. The explanation of each issue should identify:
 - a. The significance criteria or threshold, if any, used to evaluate each question; and
 - b. The mitigation measure identified, if any, to reduce the impact to less than significance

3.1 Aesthetics

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
<u>l.</u>	AESTHETICS - Except as provided in Public Re	esources Code S	ection 21099, wo	ould the project:	
a)	Have a substantial adverse effect on a scenic vista?			\boxtimes	
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 day or nighttime views in the area?				

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

Less-than-Significant Impact. Scenic vistas are viewpoints from publicly accessible places, where expansive/panoramic views of a large geographic area can be viewed. These often extend into the distance and can be from an elevated position or from a flat place where views into the distance are unimpeded by development. In Port Hueneme, the primary scenic vista occurs at the shoreline, particularly from Surfside Drive and the Port Hueneme Beach Park (City of Port Hueneme 2021).

The project site is located directly north of the Pacific Ocean and approximately 0.3-mile west of Surfside Drive and the Port Hueneme Beach Park. However, despite being in close proximity to these scenic viewpoints, the project site is surrounded by existing structures associated with industrial port uses. Additionally, the project would involve demolition of several buildings onsite and would not develop new buildings. As such, the project would not have an adverse effect on a scenic vista. Impacts would be less than significant.

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

No Impact. There are no officially designated scenic highways in or within 36 miles of the project site. According to the California Department of Transportation (Caltrans), the nearest eligible state scenic

highway is State Route 1 (Pacific Coast Highway), located more than 3 miles north of the project site (Caltrans 2018). Due to the intervening urban environment and natural topography located between the project site and this eligible state scenic highway, development of the project would occur outside of the viewshed of this, and any other, designated scenic highway. Therefore, no impacts associated with state scenic highways would occur.

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

No Impact. Per PRC Section 21071, an "urbanized area" is defined as "(a) An incorporated city that meets either of the following criteria: (1) Has a population of at least 100,000 persons; [or] (2) Has a population of less than 100,000 persons if the population of that city and not more than two contiguous incorporated cities combined equals at least 100,000 persons."

The project site is located within the planning boundaries of the Oxnard Harbor District. However, for this analysis, the population of the City of Port Hueneme shall be used because there is no residential population within the Oxnard Harbor District. The City of Port Hueneme has a population of 21,723 persons (US Census 2021a). The City of Port Hueneme is adjacent to the City of Oxnard which has a population of 202,063 persons (US Census 2021b). Thus, because the combined population is more than 100,000 persons, the project satisfies the first requirement of PRC Section 21070, described above. Therefore, the project is located within an urbanized area.

The project site is zoned for Port Related Uses (M-PR) (City of Port Hueneme 2022). The project involves demolition of several buildings associated with former Navy properties. Removal of these buildings would allow for use as open backlands for ongoing District operations now, and ostensibly future aquaculture operations. The site would continue with Port-Related Uses that would not exclude aquaculture use and/or cargo related uses. The project would not include development or propose a new use that would conflict with the zoning of the site. As such, no impact would occur.

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

No Impact. The project involves demolition of several buildings associated with former Navy properties. Removal of these buildings would allow for use as open backlands for ongoing District operations now. The project does not propose new buildings or light structures. Therefore, the project would not introduce new sources of light or glare. No impact would occur.

3.2 Agriculture and Forestry Resources

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact	
II.	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 Dept. 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?				\boxtimes	
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))?				\boxtimes	
d)	Result in the loss of forest land or conversion of forest land to non-forest use?				\boxtimes	
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?				\boxtimes	

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

No Impact. The project is located on the Port Hueneme wharf area and is largely paved and developed with several single-story buildings. The California Department of Conservation (CDOC) Important Farmland Map for Ventura County indicates that the Project site is designated as Urban and Built-Up Land (CDOC 2018). Therefore, the project does not support farmland and would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. As such, there would be no impact.

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

No Impact. As described above, the project site is largely previously developed and does not support agricultural land uses. The project site is zoned as M-PR (Port-Related Industry Zone) by the City of Port Hueneme's Municipal Code, and is designated as Port in the City of Port Hueneme's General Plan. The Port Master Plan designates the project site as Aquaculture / Fisheries / Navigation/ Marine Research & Education/Mixed Use Waterfront Complexes. Land uses surrounding the project site include port-related uses, and there is no agricultural land within close proximity to the site. The site would continue with Port_Related Uses that would not exclude aquaculture use and/or cargo related uses. Therefore, the project would not conflict with existing zoning for agricultural use or a Williamson Act contract. As such there would be no impact.

c) Would the project 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))?

No Impact. There are no areas identified or designated in the City's zoning map as forest or timber land on or near the project site (City of Port Hueneme 1998). The project would not conflict with existing zoning for, or cause the rezoning of, forest land or timberland. Thus, the project would have no impact on the loss or conversion of forest land or timberland.

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

No Impact. The project site and vicinity does not support forest land. Therefore, the project would not result in the loss of forest land or conversion of forest land to non-forest use. As such there would be no impact.

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

No Impact. Refer to responses a-d. No impacts would occur.

3.3 Air Quality

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact		
III.	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?			\boxtimes			

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?			\boxtimes	
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			\boxtimes	

The significance criteria used to evaluate the project impacts to air quality is based on the recommendations provided in Appendix G of the CEQA Guidelines.

Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) indicates that, where available, the significance criteria established by the applicable air quality management district or pollution control district may be relied upon to determine whether the project would have a significant impact on air quality. The Ventura County Air Pollution Control District (VCAPCD) (2003) has adopted Air Quality Assessment Guidelines for quantifying and determining the significance of air quality emissions. Thresholds of significance contained in the Air Quality Assessment Guidelines include:

- The VCAPCD considers operational air quality impacts to be significant if the project would generate more than 25 pounds per day of the ozone precursors ROC or NO_x.
- The VCAPCD states that construction-related emissions of ROC and NO_x are not counted toward the two significance thresholds above, since these emissions are temporary. However, construction-related emissions should be mitigated if estimates of ROC and NO_x emissions from the heavy-duty construction equipment anticipated to be used for a particular project exceed the 25 pounds per day threshold.
- A project with operational emissions in excess of two pounds per day of ROC or NO_x that is found inconsistent with the Air Quality Management Plan (AQMP) would have a cumulatively considerable contribution to a significant cumulative air quality impact. Inconsistent projects are typically those that cause the existing population to exceed the population forecasts contained in the most recently adopted AQMP.
- The VCAPCD has not established quantitative thresholds for particulate matter for either construction or operation. However, the VCAPCD states a project would have a significant impact if it would be reasonably expected to generate fugitive dust emissions in such quantities as to cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which may endanger the comfort, repose, health, or safety of any such person or the public. The VCAPCD recommends implementation of fugitive dust measures described in Section 7.4.1 of the Air Quality Assessment Guidelines as part of all project-related dust generating operations and activities.
- A project would result in significant impacts from odor emissions if it may reasonably be expected to generate odorous emissions in such quantities as to cause detriment, nuisance, or annoyance to any

considerable number of persons or to the public, or which may endanger the comfort, repose, health, or safety of any such person or the public, or which may cause, or have a natural tendency to cause, injury or damage to business or property.

 A project would result in cancer risk to the maximum exposed individual greater than 10 in one million and the ground-level concentrations of non-carcinogenic toxic air pollutants would result in a hazard index of greater than 1.

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

Less-than-Significant Impact. An Air Quality and Greenhouse Gas Emissions Memorandum was prepared for the project and is referred to as Appendix A. The VCAPCD Assessment Guidelines discuss how a project can be found consistent with the applicable AQMP. As stated in Appendix A, the applicable AQMP for the project area is the 2016 Ventura County AQMP, adopted by the VCAPCD in 2017. According to the VCAPCD Assessment Guidelines, a project with estimated emissions of 2 pounds per day or greater of reactive organic compounds (ROC) or 2 pounds per day or greater of oxides of nitrogen (NOx) that is found to be inconsistent with the AQMP will also have a significant cumulative adverse air quality impact (Appendix A). There are four steps to determining consistency with the AQMP for projects located in growth areas:

- Determine whether the project conforms to the applicable General Plan;
- Determine the current estimated population of the growth area;
- Compare the current estimated population of the growth area population target for the next year. If the current estimated population of the growth area is below its next year's population target, and the project conforms to the applicable General Plan designation, the project is determined to be consistent with the AQMP;
- If the current estimated population of the growth areas exceeds its next year's population target, the project should be found to be inconsistent with the AMQP. Inconsistency with the AQMP is considered a significant cumulative adverse air quality impact.

As discussed under the second impact criterion below, project construction would not exceed 2 pounds per day of ROC emissions; however, project construction (demolition of buildings, grading, and paving) would exceed 2 pounds per day of NOX emissions. The project is consistent with the existing land use designation and does not propose a change in land use designation. Accordingly, the project would not conflict with the Southern California Association of Governments 2016 Regional Transportation Plan/Sustainable Communities Strategy (SCAG RTP/SCS) forecasts used in the AQMP development. In addition, the project does not propose additional land for development, nor would it induce additional population in the project area. Because the project would involve only the demolition of existing buildings, there would not be an increase in population in the region associated with its implementation. Accordingly, the project is consistent with the AQMP. As a result, this impact would be less than significant.

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

Less-than-Significant Impact. Air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and the VCAPCD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level

thresholds of significance for criteria pollutants are used in the determination of whether a project's individual emissions would have a cumulatively considerable contribution on air quality. If a project's emissions would exceed the VCAPCD significance thresholds, it would be considered to have a cumulatively considerable contribution, and thus have a significant adverse impact on air quality in Ventura County (VCAPCD 2003). This impact evaluation focuses on regional mass daily criteria air pollutant emissions; therefore, this assessment evaluates the project actions on the whole similar to the threshold analyzed above in the previous impact criterion.

A quantitative analysis was conducted to determine whether proposed construction activities (limited to demolition, grading, and paving) would result in a cumulatively considerable net increase in emissions of criteria air pollutants for which the SCCAB is designated as nonattainment under the NAAQS or CAAQS.

The following discussion quantitatively evaluates project-generated impacts associated with construction of the project.

Construction Emissions

Proposed construction activities (demolition, grading, and paving) would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment and soil disturbance) and off-site sources (i.e., on-road haul trucks, delivery trucks, and worker vehicle trips). Construction emissions can vary substantially from day to day, depending on the level of activity; the specific type of operation; and, for dust, the prevailing weather conditions. Therefore, such emission levels can only be approximately estimated with a corresponding uncertainty in precise ambient air quality impacts.

Table 3.1-1 presents the estimated maximum daily construction emissions generated during construction of the project. The values shown are the maximum summer or winter daily emissions results from CalEEMod. Details of the emission calculations are provided in Appendix A.

Table 3.3-1. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions

	ROC	NO _x	СО	SO _x	PM ₁₀	PM _{2.5}	
Year	Pounds per day						
2023	0.61	5.3	6.73	0.01	0.52	0.26	
VCAPCD Threshold	25	25	N/A	N/A	N/A	N/A	
Threshold exceeded?	No	No	No	No	No	No	

Notes: N/A = not applicable. See Appendix A for detailed results.

Source: Appendix A

As shown in Table 3.3-1, daily construction emissions would not exceed the VCAPCD significance thresholds for ROC or NO_x during project construction. Notably, the VCAPCD has not established quantitative thresholds for particulate matter for either construction or operation. However, the VCAPCD states a project would have a significant impact if it would be reasonably expected to generate fugitive dust emissions in such quantities as to cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which may endanger the comfort, repose, health, or safety of any such person or the public. Therefore, the VCAPCD recommends implementation of fugitive dust measures described in Section 7.4.1 of the Air Quality Assessment Guidelines as part of all project-related dust generating activities.

Fugitive dust reduction measures presented within the VCAPCD Guidelines include the following:

- 1. The area disturbed by clearing, grading, earth moving, or excavation operations shall be minimized to prevent excessive amounts of dust.
- Pre-grading/excavation activities shall include watering the area to be graded or excavated before
 commencement of grading or excavation operations. Application of water (preferably reclaimed, if
 available) should penetrate sufficiently to minimize fugitive dust during grading activities.
- 3. Fugitive dust produced during grading, excavation, and construction activities shall be controlled by the following activities:
 - a) All trucks shall be required to cover their loads as required by California Vehicle Code §23114.
 - b) All graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved on-site roadways, shall be treated to prevent fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally-safe soil stabilization materials, and/or roll-compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible.
- 4. Graded and/or excavated inactive areas of the construction site shall be monitored by (indicate by whom) at least weekly for dust stabilization. Soil stabilization methods, such as water and roll-compaction, and environmentally-safe dust control materials, shall be periodically applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area should be seeded and watered until grass growth is evident, or periodically treated with environmentally-safe dust suppressants, to prevent excessive fugitive dust.
- 5. Signs shall be posted on-site limiting traffic to 15 miles per hour or less.
- 6. During periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties), all clearing, grading, earth moving, and excavation operations shall be curtailed to the degree necessary to prevent fugitive dust created by on-site activities and operations from being a nuisance or hazard, either off-site or on-site. The site superintendent/supervisor shall use his/her discretion in conjunction with the VCAPCD in determining when winds are excessive.
- 7. Adjacent streets and roads shall be swept at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.
- 8. Personnel involved in grading operations, including contractors and subcontractors, should be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health regulations.

As previously discussed, Ventura County has been designated as a federal and state nonattainment area for ozone (O_3) and state coarse particulate matter (PM_{10}) . The nonattainment status is the result of cumulative emissions from various sources of air pollutants and their precursors within Ventura County, including motor vehicles, off-road equipment, and commercial and industrial facilities. Construction and operational activities of the project would generate ROC and NO_x emissions (precursors to O_3) and emissions of PM_{10} and fine particulate matter $(PM_{2.5})$. However, as indicated in Table 3.3-1, project-generated emissions resulting from construction (demolition, grading, and paving) would not exceed the VCAPCD significance thresholds for ROC and NO_x .

Cumulative localized impacts would potentially occur if a project were to occur concurrently with another off-site project. Schedules for potential future projects near the project component areas are currently

unknown; therefore, potential impacts associated with two or more simultaneous projects would be considered speculative.¹ However, future projects would be subject to CEQA and would require air quality analysis and, where necessary, mitigation. Criteria air pollutant emissions associated with construction activity of future projects would be reduced through implementation of control measures required by the VCAPCD. Cumulative PM¹0 and PM².5 emissions would be reduced because all future projects would be subject to VCAPCD Rule 55 (Fugitive Dust), which sets forth general and specific requirements for all sites in the VCAPCD. In addition, the VCAPCD Guidelines includes fugitive dust reduction measures which projects must implement to reduce dust generating activities.

Therefore, based on the above considerations, the project would not result in a cumulatively considerable increase in emissions of nonattainment pollutants, and impacts would be less than significant during construction.

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

Less-than-Significant Impact. People most likely to be affected by air pollution include children, the elderly, and people with cardiovascular and chronic respiratory diseases. According to the VCAPCD, sensitive receptors include residences, schools, hospitals, and daycare centers (VCAPCD 2003). The closest off-site sensitive receptors to the project are single-family residences, located approximately 1,650 feet northwest of the project site.

Health Impacts of Toxic Air Contaminants

The greatest potential for toxic air contaminants (TAC) emissions during construction would be diesel particulate emissions from heavy equipment operations and heavy-duty trucks during construction of the project and the associated health impacts to sensitive receptors. The closest sensitive receptors is an existing residence located 1,650 feet northwest of the project site. Total project construction (demolition, grading, and paving) would last approximately 2.5 months, after which project-related TAC emissions would cease. According to the Office of Environmental Health Hazard Assessment, health risk assessments (which determine the exposure of sensitive receptors to toxic emissions) should be based on a 30-year exposure period for the maximally exposed individual receptor; however, such assessments should also be limited to the period/duration of activities associated with the project. A 2.5-month construction schedule represents a short duration of exposure (less than 1% of a 30-year exposure period) while cancer and chronic risk from DPM are typically associated with long-term exposure. Thus, the project would not result in a long-term source of TAC emissions. Furthermore, the project would not require the extensive use of heavy-duty construction equipment or diesel trucks over the duration of construction, which would limit the exposure of any proximate individual sensitive receptor to TACs.

No residual TAC emissions and corresponding cancer risk are anticipated after demolition of the seven buildings. Thus, the project would not result in a long-term (i.e., 9-year, 30-year, or 70-year) source of TAC emissions. Therefore, the exposure of project-related TAC emission impacts to sensitive receptors would be less than significant.

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The CEQA Guidelines state that if a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact (14 CCR 15145).

Health Impacts of Carbon Monoxide

The VCAPCD recommends a carbon monoxide (CO) hotspot screening analysis use the screening procedure in Caltrans' CO Protocol should be conducted for any project with indirect emissions greater than the applicable ozone project significance thresholds in Section 3.3.1 of the Ventura County Air Quality Assessment Guidelines, that may significantly impact roadway intersections that are currently operating at, or are expected to operate at, Levels of Service E, or F. A CO hotspot screening analysis should also be conducted for any project-impacted roadway intersection at which a CO hotspot might occur. During construction (demolition, grading, and paving) of the project, construction traffic would affect the intersections near the project site. However, the project would be temporary and would not be a source of daily, long-term mobile-source emissions. In addition, due to continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SCCAB is steadily decreasing. Furthermore, the project would not result in operational activities because the project would consist of vacant land once complete. Therefore, the project would not generate additional traffic volumes that would result in CO hot spots. This impact would be less than significant.

Health Effects of Criteria Air Pollutants

Construction emissions of the project would not exceed the VCAPCD thresholds for any criteria air pollutants, including ROC and NO_x.

Due to the lack of quantitative methods to assess this complex photochemistry, the holistic effect of a single project's emissions of O_3 precursors is speculative. That being said, because the project would not exceed the VCAPCD thresholds, the project would not contribute to health effects associated with O_3 .

Because project-related NO_x emissions would not exceed the VCAPCD thresholds, and because Ventura County is a designated attainment area for NO_2 (and NO_2 is a constituent of NO_x) and the existing NO_2 concentrations in the area are well below the NAAQS and CAAQS standards, it is not anticipated that the project would cause an exceedance of the NAAQS and CAAQS for NO_2 or result in potential health effects associated with NO_2 and NO_x .

CO tends to be a localized impact associated with congested intersections. The associated potential for CO hotspots is discussed below (in the potential to expose sensitive receptors to substantial pollutant concentrations evaluation) and determined to be less than significant. Thus, the project's CO emissions would not contribute to significant health effects associated with CO.

The project would be required to implement fugitive dust reduction measures as specified in the VCAPCD Guidelines to limit PM_{10} or $PM_{2.5}$ emissions. Therefore, the project would not contribute to exceedances of the NAAQS and CAAQS for particulate matter and would not obstruct Ventura County from coming into attainment for these pollutants. The project would also not result in substantial DPM emissions during construction (demolition, grading, and paving), with construction activity lasting approximately 2.5 months. Additionally, the project would be required to comply with VCAPCD Rule 55, which limits the amount of fugitive dust generated during construction. Due to the minimal contribution of particulate matter during construction, the project is not anticipated to result in health effects associated with PM_{10} or $PM_{2.5}$.

In summary, construction and operation of the project would not result in exceedances of the VCAPCD thresholds for criteria pollutants, and potential health effects associated with criteria air pollutants would be less than significant.

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

Less-than-Significant Impact. The occurrence and severity of potential odor impacts depends on numerous factors. The nature, frequency, and intensity of the source; the wind speeds and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying and cause distress among the public and generate citizen complaints.

Odors would be potentially generated from vehicles and equipment exhaust emissions during construction (demolition, grading, and paving) of the project. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment and asphalt pavement application. Such odors would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people. Furthermore, the project entails demolition of existing buildings and the paving of surfaces, which would not result in the creation of long-term sources commonly associated with odors. Therefore, impacts associated with odors during construction would be less than significant.

3.4 Biological Resources

		Potentially Significant Impact	Less Than Significant Impact 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?				

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				

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

Less than Significant Impact with Mitigation Incorporated. Potential impacts to biological resources are expected to be minimal due to the disturbed and developed nature of the site and surrounding area. Nonetheless, a biological reconnaissance survey was conducted for the project site and is referred to as Appendix B. Dudek conducted the biological reconnaissance survey on January 4, 2022 and inspected the site for potential to support sensitive biological resources. The survey confirmed that only anthropogenic land covers occurred on the project site, and that the surrounding area is heavily developed. The only land covers observed were developed, disturbed, and ornamental. The "developed" land cover consisted of the existing structures and associated paved driveways, parking areas, and walkways. The "disturbed" land cover consisted of graded, maintained (mowed) areas surrounding the buildings, which support non-native grasses. The "ornamental" land cover on the site consisted of several ornamental trees.

Of the 27 plant species observed during the survey, only two (both common herbaceous species) were native: silver bur ragweed (*Ambrosia camissonis*), a perennial species usually associated with the upper portion of beaches, and telegraphweed (*Heterotheca grandiflora*), an annual that is highly tolerant of disturbance. All wildlife species observed were common species associated with the habitats occurring on the project site, except for two bird species, western gull (*Larus occidentalis*) and brown pelican (*Pelecanus occidentalis*), associated with the nearby beach and marine habitat, and only observed flying over the area. California brown pelican (*P.o. californicus*), the locally occurring subspecies of the latter of these two species, was formerly listed as endangered under the federal Endangered Species Act (ESA) and is considered fully protected by the California Department of Fish and Wildlife, a designation that protects it from disturbance at nesting sites and roosts.

The buildings, trees, and other ornamental vegetation on the project site have the potential to support nesting birds between approximately February and the end of August. Bats may have the potential to roost in the buildings proposed to be demolished. Due to the highly disturbed nature of the site, the lack of native vegetation, and its isolation from natural habitats, no special-status plant or wildlife species are expected to occur on the site itself. A narrow strip of land south of the public access path, approximately 25 feet south of the project site, is highly disturbed and unlikely to support any special-status plants. In addition, the nature of the project, to demolish several buildings on the site, would not result in impacts to vegetation or plants offsite. Surrounding lands, particularly the nearby beach (approximately 70 feet south of the site) and the Pacific Ocean, may have potential to support special-status wildlife species. Western snowy plover (*Charadrius nivosus nivosus*) and California least tern (*Sternula antillarum browni*) are known to nest at nearby Ormond Beach, within 2.0 miles southeast of the project site, and they may have some potential to nest on the beach nearer the site. In addition, the stretch of beach approximately 70 feet south of the site is designated as federal critical habitat for western snowy plover.

The project site itself is not expected to support special-status plant or animal species. However, the project may have potential to impact other sensitive resources on the site itself, specifically nesting native birds and bats, and noise from construction (demolition, grading, and paving) of the project may have the potential to result in impacts to special-status wildlife species occurring near the site, such as western snowy plover or California least tern. As such, it is recommended that the project conduct additional surveys for these biological resources provided below as mitigation measures BIO-1 and BIO-2.

BIO-1:

If demolition work must occur during the nesting bird season (February 1 through August 31), a pre-activity nesting bird survey will be conducted to determine if active nests are present within or adjacent to the work area. Specifically, prior to any demolition activity, surveys for active nests will be conducted by a qualified ornithologist within 300 feet of the project site and no more than 7 days prior to the start of activities in order to identify any nests that are present and to determine their status. The survey and no disturbance buffer will be established in coordination with the CDFW and USFWS (as a portion of the area to survey includes the beach, which is federally designated critical habitat for snowy plover). If active nests are found a minimum no disturbance buffer of 100 feet for non-listed bird species and a 300-feet for state- or federally-listed bird species will be maintained until the breeding season has ended, or until the biologist determines that the birds have fledged and are no longer reliant upon the nest or parental care for survival. The minimum buffer set by USFWS or CDFW will be maintained for identified nests of any listed species. Any variance from these buffers will need to be supported by the biologist and agencies should be notified in advance of implementation of a no disturbance buffer variance. Results of the surveys should be provided to CDFW and USFWS.

BIO-2:

If construction activities occur during the breeding/pupping season (April to September), an emergence survey for bats will be performed to determine the potential for all of the buildings to support maternity roosts. The surveys would include an inspection of the inside of the structures for roosting bats and sign of roosting bats (urine staining, guano) and active acoustic monitoring for bats emerging from the structures at and following dusk. The active acoustic survey would require the presence of up to two biologists observing the buildings for emerging bats at dusk and equipped with acoustic recording devices that record bat vocalizations. Recordings will be analyzed using specialized software following

the survey, to determine which bats are present and their potential for using the structures for maternity roosts. In addition, several days of passive acoustic monitoring, and analysis of the recordings collected, will be conducted to gather data on bat presence over a longer period. Passive monitoring involves the deployment of unattended and secured devices over at least 3 nights or longer. All survey results, including field data sheets, will be provided to the California Department of Fish and Wildlife (CDFW). Locations of all roosts should be kept confidential to protect them from disturbance. If potential roosts are determined to be present then the roosts must be analyzed further to determine the species present and if maternity roosts are present. If maternity roosts of any bat species are present, the CDFW will be notified and no work will occur within 100 feet of the roost location of any bat species until the end of the pupping season.

Therefore, this impact is considered less than significant with mitigation incorporated.

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

No Impact. The project site is located entirely on developed and disturbed land. As discussed in Section 3.4 (a), only anthropogenic land covers occurred on the project site, and that the surrounding area is heavily developed. The only land covers observed were developed, disturbed, and ornamental. The "developed" land cover consisted of the existing buildings and associated paved driveways, parking areas, and walkways. The "disturbed" land cover consisted of graded, maintained (mowed) areas surrounding the buildings, which support non-native grasses. The "ornamental" land cover on the site consisted of several ornamental trees. Per Appendix B, there are no wetlands or waters that occur within or immediately adjacent to the site. Additionally, the project site does not support any sensitive vegetation communities, or any natural communities of any kind. Therefore, no impacts associated with riparian or sensitive vegetation communities would occur.

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

No Impact. As discussed in Appendix B, there are no state or federally protected wetlands or waters that occur within or immediately adjacent to the site, although the Pacific Ocean, which is considered waters of the U.S., is only approximately 110 feet south of the site. The project involves demolition of several buildings associated with former Navy properties. The project would not propose any new structures; thus, the project would not create a substantial effect through direct removal, filling, hydrological interruption, or other means. Therefore, no impacts to jurisdictional waters or wetlands would occur.

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

No Impact. Wildlife corridors are linear, connected areas of natural open space that provide avenues for migration of animals. Habitat linkages are small patches that join larger blocks of habitat and help reduce

the adverse effects of habitat fragmentation; they may be continuous habitat or discrete habitat islands that function as steppingstones for wildlife dispersal.

As discussed in Appendix B, the project site and surrounding area are not expected to be important for wildlife movement, as the site is within a fenced area not accessible to larger and medium-sized wildlife, and it is not connected with any significant patches of native vegetation. As such, implementation of the project would not interfere with the movement of any native residents, migratory fish, or wildlife species. Therefore, no impacts associated with wildlife movement or wildlife corridors would occur.

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

No Impact. The Oxnard Harbor District Policy 106, the District's environmental policy, provides that the District shall fully comply and adhere to applicable local, state and federal regulations related to the District (Port of Hueneme 2022). All the trees located within the property of the District are planted, ornamental, non-native species, and none are protected. Specifically, the project site does not contain trees and would not propose the removing or planting new trees. Therefore, no impacts associated with local policies or ordinances protecting biological resources would occur.

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

No Impact. The project site is not located within any habitat conservation plan; natural community conservation plan; or other approved local, regional, or state habitat conservation plan area. Therefore, no impacts associated with conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan would occur.

3.5 Cultural Resources

		Potentially Significant Impact	Less Than Significant Impact 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?			\boxtimes	
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?		\boxtimes		

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

Less-than-Significant Impact. The term "historical resources" include the following:

- (1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code §5024.1, Title 14 CCR, Section 4850 et seq.).
- (2) A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- (3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code, § 5024.1, Title 14 CCR, Section 4852) including the following:
 - (A) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
 - (B) Is associated with the lives of persons important in our past;
 - I Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
 - (D) Has yielded, or may be likely to yield, information important in prehistory or history.

Under existing conditions, the project site contains buildings associated with former Navy use. The Port Hueneme Lighthouse (P-56-152840) is also located within the built environment study area and has been previously determined individually eligible for the NRHP and the CRHR following consultation with the State Historic Preservation Officer (SHPO) in 2013 (USCG_2013_0520_001). This resource retains a California Historic Resource Status (CHRS) code in the California Built Environment Resource Directory (BERD) of 2S2 (Individually determined eligible for NRHP by consensus through Section 106 process, Listed in the CRHR). Dudek agrees with the 2003 NRHP evaluation findings that the Port of Hueneme Lighthouse appears individually eligible for listing under the NRHP Multiple Property Document (MPD), Light Stations of California and the NRHP MPD, Light Stations in the United States. A DPR form update for the property was prepared in conjunction with the proposed project verifying that existing information recorded about the Lighthouse remains accurate, which can be found in Appendix C.

While the Port Hueneme Lighthouse (P-56-152840) building itself is a CEQA historical resource, none of the previous documentation provided evaluations of the associated historic age buildings, collectively referred to as the Port Hueneme Light Station, or former Navy property. The former Navy property as a multicomponent site is not eligible under any NRHP or CRHR designation criteria. A detailed analysis of this property is presented in the Built Environment Inventory and Evaluation Report (Appendix C). As evaluated in Appendix C, none of the historic aged buildings on the former Navy property to be demolished have been found to be significant cultural resources. No disturbance or other effects to the Lighthouse would result from the project and none of the proposed modifications to the site would introduce any new incompatible elements that would diminish the integrity of the Lighthouse. Therefore, the proposed project would not cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5. a.

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

Less-than-Significant Impact with Mitigation Incorporated. Archaeological literature and a records search of the California Historical Resources Information System (CHRIS) database revealed that one archaeological resource has been recorded as overlapping the northwestern portion of the proposed project site. The prehistoric site (CA-VEN-663) was recorded as consisting, at least, of shell midden, an end-battered cobble, fire altered rock, and mammal bones based on one shovel test pit conducted in 1933. CA-VEN-663 is described in the site record as a "canoe camp during the historic phase of the Late Period" intermixed with modern shell deposited by the US Navy. Evidence collected through background research and consultation with local Chumash descendants suggests CA-VEN-663 is likely the site of the historic canoe camp of *Wene'mu* where Chumash would sleep and embark and debark from their watercraft and then travel to the islands (Horne 1980). Richard Van Valkenburgh documents his observations of CA-VEN-663 in his 1933 manuscript Notes on the Ethnography and Archaeology of the Ventureno Chumash Indians that described the site as a midden of blackened sand, clam, cockle and pecten shells and mammal bone extending to a depth of 3 feet. Van Valkenburgh's fieldwork was conducted prior to major development in the area and as such is as close a representation available of the area during prehistoric, protohistoric and historic periods prior to the significant disturbance of the area.

Horne recorded that CA-VEN-663 was 98% destroyed by the construction of the entrance channel to Port Hueneme. However, since Horne did not conduct any subsurface testing and based on his report Final Report: Onshore Cultural Resources Assessment, Union Oil Company Platform Gina and Platform Gilda Project Federal Lease OCS P-0202 and P-0216, Offshore Southern California (Horne 1980), he

recommended that future subsurface testing occur to definitively determine whether intact cultural deposits exist within the archaeological site boundary. Horne also states in the same report (VN-00236) that "there is a high probability that burials (see King and Craig 1978) and buried deposit will occur along the 26 ipelinee corridor" that was proposed, in the late 1970s, to intersect the current proposed project site. Observation of ground disturbance was also conducted in 1983 by Steven Schwartz as part of the United States Army Corps of Engineers' dredging of Channel Islands Harbor; no report could be found associated with the Schwartz's observations. As documented in the site record, Schwartz asserted that at least the center of the northern portion of the archaeological site was destroyed when he observed a 30-foot trench excavated to 5 feet and witnessed no indication of a buried cultural deposit except a few scattered shells that he interpreted to not constitute a midden. Schwartz did not mention any observation of any other portion of CA-VEN-663 other than the northcentral portion of the archaeological site.

The proposed project site is located entirely on disturbed land within the boundaries of the District. Historic aerials demonstrate that the project site has been developed since at least 1945 and has been subject to continual development to present day. Background research documents that modification of the proposed project site and surrounding area began in the late 1930s and resulted in a significant change from the natural environment existent when Native American communities occupied the area. The project would involve demolition of some existing buildings and minor grading associated with paving of the project site. Proposed disturbances would not extend deeper than 10 feet and would be into soils previously disturbed to construct the navy buildings. According to the Port Hueneme General Plan Update EIR, the project site is underlain entirely by artificial fill consisting of engineered and/or recently compacted fill related to prior development (City of Port Hueneme 2021). However, the depth of fill soils is uncertain and would overlay native soils that have a potential to include intact cultural deposits that could reveal important information about CA-VEN-663 and the prehistoric, protohistoric and historic periods of human activity in the area.

Based on background research, a search of the CHRIS database revealing a prehistoric archaeological site mapped as overlapping the northwest portion of the proposed project site, and evidence of fill soils within the proposed project site, the potential for proposed ground disturbances to encounter cultural material within fill soils is low but possible considering the unknown nature or origin of the fill soils. Also based on the evidence revealed, the potential to encounter cultural material within native soils, if disturbed, is moderate to high. Since CA-VEN-663 has been largely destroyed by development prior to the enactment of cultural resource laws aimed at protecting archaeological sites, any remaining intact cultural deposits have a significant potential to reveal important information about the site and about the prehistoric, protohistoric and historic periods of human activity in the area that may currently be unknown and otherwise eluded due to previous destruction. As such, the following measures are required to ensure that unknown cultural resources that are inadvertently encountered during project implementation are assessed, evaluated (if necessary) and treated in accordance with CEQA. Note: some measures provided are conditional and only necessary if it is determined proposed disturbances will occur outside of documented fill soils. CUL-1 development of a Cultural Resource Treatment Plan that will provide a protocol for the identification and proper treatment of cultural resources; CUL-2 (conditional) supplemental pedestrian survey of exposed native soils once fill soils are removed; and CUL-3 cultural monitoring conducted during initial ground disturbing activities. These measures are provided in greater detail below as mitigation measures CUL-1 through CUL-3. A confidential Phase I Archaeological Resources Report was prepared for the project that informed these findings and is part of the project record.

CUL-1

Cultural Resource Treatment Plan. The applicant/owner/developer shall retain a Principal Investigator/Archaeologist, meeting the Secretary of Interior Standards and who has a minimum of 2 years' experience with prehistoric and historic resources within Southern California (preferably within the local area), to assess information available (final grading and construction plans, geotechnical testing results, as-built plans, etc.) and determine the depth at which native soils exist and would be impacted by Project implementation. The depth of native soils shall be included in the Plan to guide cultural assessment and monitoring efforts. Impacts to cultural resources shall be minimized through implementation of pre- and post- construction tasks. Tasks pertaining to cultural resources include the development of a cultural resource treatment plan (Plan). The purpose of the Plan is 1) to identify whether native soils will be impacted by project implementation; 2) design an appropriate monitoring program based on the nature of soils that will be impacted; 3) to advise construction personnel in the identification and proper response to an inadvertent discovery of cultural resources; 4) in the case that cultural resources are identified, provide a work plan to properly assess, evaluate, and treat those resources in accordance with state and local guidelines.

Prior to commencement of construction activities, a Worker Environmental Awareness Program (WEAP) shall be submitted by the Principal Investigator/Archaeologist to the District for review and approval. All construction personnel and monitors who are not trained archaeologists shall be briefed regarding inadvertent discoveries prior to the start of construction activities through implementation of the WEAP training. The WEAP training shall provide: 1) specific details on the kinds of archaeological materials and tribal cultural resources that may be identified during construction of the project; 2) explanation of the importance of and legal basis for the protection of significant archaeological resources; 3) the proper procedures to follow in the event that cultural resources, tribal cultural resources or human remains are uncovered during ground-disturbing activities. Existence and importance of adherence to this Plan as well as the WEAP training shall be stated on all project site plans intended for use by those conducting the ground disturbing activities.

CUL-2

(Conditional Measure) Supplemental Archaeological Pedestrian Survey. If it is determined that project implementation will extend into native soils, the following measure shall be necessary. Once pavement and fill soils have been removed, a supplemental shall be archaeological pedestrian survey conducted by Principal Investigator/Archaeologist (as defined in CUL-1) or their assigned representative, an archaeologist/s overseen by the Principal Investigator/Archaeologist. If cultural material is observed in native soil after the removal of fill soils, an Extended Phase I Archaeological Investigation shall be conducted by the Principal Investigator/Archaeologist to delineate the absence/presence of cultural material both vertically and horizontally within the project site. Following the investigation and any subsequent testing or evaluation in accordance with CEQA the Principal Investigator/Archaeologist conducting the investigation shall provide the findings of significance pursuant to CEOA. If the resource/s is found to meet the criteria of a significant or unique archaeological resource pursuant to CEQA, the Principal Investigator/Archaeologist shall make recommendations for avoidance of the significant resource in accordance with CEQA requirements. If avoidance is determined not feasible pursuant to CEQA, the Principal Investigator/Archaeologist will provide the District with appropriate mitigation of the resource in accordance with CEQA which, depending on the nature of the impact to the resource, may include data recovery conducted according to professional standards as outlined in Office of Historic Preservation *Guidelines for Archaeological Research Designs*. Likewise, if the resource/s is determined to not be a significant or unique archaeological resource, the Principal Investigator/Archaeologist may provide the District with treatment and protocols in addition to CUL-3; otherwise, CUL-3 will continue to be required regardless of the outcome of investigation.

CUL-3

Archaeological Monitoring. An archaeological technician/monitor, under the direction of the Principal Investigator/Archaeologist (as defined in CUL-1), shall be retained to observe ground disturbing activities and respond to and address any inadvertent discoveries identified during initial excavation in native soils. Initial excavation is defined as initial construction-related earth moving of sediments from their place of deposition. As it pertains to archaeological monitoring, this definition excludes movement of sediments after they have been initially disturbed or displaced by project-related construction. A Principal Investigator/Archaeologist shall oversee and establish monitoring efforts as needed (increase, decrease, or discontinue monitoring frequency) based on the observed potential for construction activities to encounter cultural deposits or material. The archaeological monitor shall be responsible for maintaining daily monitoring logs. Upon completion of all ground disturbing activities, an archaeological monitoring report shall be prepared within 60 days following completion of ground disturbance and submitted to the District for review. This report shall document compliance with approved mitigation, all conducted monitoring efforts, and include an appendix with daily monitoring logs. The final report shall be submitted to the District and the SCCIC.

Inadvertent Discovery Clause. The following clause shall be included in the Cultural Resource Treatment Plan. In the event that potential prehistoric or historic-era archaeological resources and/or tribal cultural resources (sites, features, or artifacts) are exposed during construction activities for the project, all construction work occurring not less than 50 feet of the find shall immediately stop and the Principal Investigator/Archaeologist must be notified immediately to assess of the discovery and determine whether additional study is warranted. Depending upon the nature of the discovery, the Principal Investigator/Archaeologist may simply record the find and allow work to continue. If the discovery proves potentially significant under CEQA, additional tasks as outlined in CUL-2 shall be required. If the discovery is determined significant under CEQA and avoidance is not feasible, data recovery shall be required. If Native American resources are discovered or are suspected, each of the consulting tribes for the project shall also be notified pursuant to [TCR-1].

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

Less-than-Significant Impact with Mitigation Incorporated. Neither background research and a search of the CHRIS database identified the presence of buried human remains interred inside or outside formal cemeteries. Nonetheless, an archaeological site is mapped as overlapping the proposed project site. Considering the project site contains artificial fill to unknown depths the likelihood of inadvertently

encountering human remains within fill soils is low however possible considering the nature of the fill soils is unknown and may have been derived from other areas of the archaeological site outside of the proposed project site. There is a moderate possibility that human remains may be inadvertently encountered within the native soils that underlay fills soils included intact human burials. As such, mitigation measures CUL-1 through CUL-3 (provided above) will ensure that unknown human remains that are inadvertently encountered during project implementation are treated in accordance with CEQA.

3.6 Energy

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

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

Short-Term Construction Impacts

Less-than-Significant Impact. The amount of electricity used during construction (demolition, grading, and paving) would be minimal because typical energy demand stems from the use of electrically powered equipment. This electricity demand would be temporary and would cease upon completion of construction; therefore, the project would not adversely impact the available electricity supply. During construction, natural gas would typically not be consumed on the project site. The majority of the energy used during construction would be from petroleum.

Petroleum fuel consumed by construction equipment would be the primary energy resource expended over the course of construction. Vehicle miles travelled (VMT) associated with the transportation of construction materials and construction worker commutes also would result in petroleum consumption. However, the project would be required to comply with CARB's Airborne Toxics Control Measure, which restricts heavyduty diesel vehicle idling time to 5 minutes. Additionally, the construction of the project would be a temporary, short-term activity, and any petroleum used during the construction phase would be used towards the development of the project; as such, petroleum use for construction would be relatively nominal and would not be wasteful or inefficient. Therefore, short-term construction impacts associated with energy consumption would be less than significant.

The project does not propose construction of any new structure. The project would allow for open backlands space offering flexible use options for ongoing District operations. Given that the project consists of improvements that would allow for more active use of the project site for storage and general backlands uses, an increased use of associated energy (primarily fuel for trucks, forklifts, etc., most likely) would result. However, the increase would not be wasteful or inefficient as the additional flexibility of the space would allow for more efficient storage and or laydown of materials or equipment compared to moving materials for storage greater distances within the port or beyond the District's boundaries. Therefore, long-term impacts associated with energy consumption would be less than significant.

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

No Impact. As discussed in Impact 3.6(a), the project would not result in wasteful, inefficient, and unnecessary consumption of energy during construction (demolition, grading, and paving) or operation. Therefore, no impacts associated with the potential of the project to conflict with a state or local renewable energy or energy efficiency plan would occur.

3.7 Geology and Soils

		Potentially Significant Impact	Less Than Significant Impact 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?			\boxtimes	
	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?			\boxtimes	

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?				
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?				

- a) Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

No Impact. The project site is within the boundaries of the District which is located within the city limits of Port Hueneme. According to the Port Hueneme General Plan Update EIR, no active faults are known or suspected to traverse Port Hueneme and the City is not included in a special seismic zone established by the Alquist-Priolo Special Studies Zones Act of 1972 (City of Port Hueneme 2021). Because the project site is not located within an active fault zone, the likelihood of fault rupture to occur within the project site is low. Additionally, the project would not exacerbate the potential for fault rupture to occur, and thus, would not directly or indirectly cause substantial adverse effects due to fault rupture. Therefore, no impacts associated with fault rupture would occur.

ii) Strong seismic ground shaking?

Less-than-Significant Impact. Like most of the Southern California region, the project site is located within a seismically active area. Seismic ground-shaking could be experienced in Port Hueneme due to seismic activity along other faults in southern California, depending upon the location of the earthquake epicenter and the character and duration of the seismic event. Thus, the project site could be exposed to strong seismic ground shaking in the event of an earthquake.

However, the project does not involve the construction of new structures, which could expose people to risk of loss, death, or injury resulting from strong seismic ground shaking. Additionally, the project would not exacerbate the potential for seismic shaking to occur, and thus, would not directly or indirectly cause

substantial adverse effects due to strong seismic ground shaking. Therefore, impacts associated with strong seismic ground shaking due to faulting would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

Less-than-Significant Impact. According to the Figure 4.6-2 of the Port Hueneme General Plan Update EIR, the project site is located within an area susceptible to liquefaction (City of Port Hueneme 2021). However, the project would not increase the exposure of people or structures to potential substantial adverse effects, including the risk from seismic-related ground failure, including liquefaction, because the project would demolish existing structures and would not construct any new structures. Therefore, impacts associated with seismic-related ground failure such as liquefaction would be less than significant.

iv) Landslides?

No Impact. The project site and surrounding area are relatively flat and lack any hillsides or topographic features typically susceptible to landslides. According to the Port Hueneme General Plan Update EIR, landslides are not a concern in Port Hueneme because of the City's flat topography (City of Port Hueneme 2021). As such, the project would not expose people or structures to risk of landslides. Therefore, no impacts associated with landslides would occur.

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

Less-than-Significant Impact. Demolition activities would disturb surface soils and temporarily leave exposed soil on the ground's surface. Common causes of soil erosion from construction sites include stormwater, wind, and soil being tracked off site by vehicles. To help curb erosion, project construction (demolition, grading, and paving) activities must comply with all applicable federal, state, and local regulations for erosion control.

Because the project would disturb one or more acres of soil, the project is subject to the California State Water Resources Control Board National Pollutant Discharge Elimination System Construction General Permit. Demolition activities would be required to incorporate various temporary best management practices (BMPs) designed to prevent erosion and siltation during demolition and excavation activities. Therefore, short-term demolition impacts associated with erosion would be less than significant. Additionally, upon completion of construction, all exposed areas would be returned to conditions similar to those prior to construction activities (i.e., hardscapes areas would be paved with new asphalt). Overall, following completion of construction, the project would not have increased the amount of exposed soils on the project site. Therefore, impacts associated with soil erosion would be less than significant.

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

Less-than-Significant Impact. As discussed in Impact 3.7(a)(iii), the project site is located within an area susceptible to liquefaction (City of Port Hueneme 2021). However, the project does not involve the construction of new habitable structures, which could expose people to risk of loss, death, or injury resulting from liquefaction or any other type of soil instability. Therefore, impacts associated with unstable geologic units or soils would be less than significant.

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

No Impact. During periods of water saturation, soils with high clay content tend to expand. Conversely, during dry periods, the soils tend to shrink. The amount of volume change depends upon the soil swell potential (amount of expansive clay in the soil), availability of water to the soil, and soil confining pressure. Swelling occurs when the soils containing clay become wet due to excessive water from poor surface drainage, over irrigation of lawns and planters, and sprinkler or plumbing leaks. These volume changes with moisture content can cause cracking of structures built on expansive soils. In addition, swelling clay soils can cause distress to lightly loaded structures, walks, drains, and patio slabs. As stated in the Port Hueneme General Plan Update EIR, there are no expansive soils located in Port Hueneme (City of Port Hueneme 2021). Additionally, the project would not construct new buildings that would be subject to risk associated with expansive soils. No impact would occur.

e) Would the project 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?

No Impact. The project would not require a septic or alternative wastewater disposal system. Therefore, no impacts associated with the ability of soils to support septic tanks would occur.

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

No Impact. Port Hueneme is located on the Oxnard Coastal Plain in the Transverse Ranges geomorphic province of California. The Transverse Ranges extend approximately 275 miles west-east from Point Arguello in Santa Barbara County, east to the San Bernardino Mountains, and south to the Anacapa-Santa Monica-Hollywood-Raymond-Cucamonga fault zone. The Transverse Ranges are composed of Proterozoic to Mesozoic intrusive crystalline igneous and metamorphic rocks overlain by Cenozoic marine and terrestrial deposits and volcanic rock (City of Port Hueneme 2021).

According to published geologic mapping, Port Hueneme is underlain by artificial fill and Quaternary young (late to middle Holocene) sedimentary units, including active beach deposits, eolian (sand dune) deposits, alluvial deposits, stream terrace deposits, and wash deposits. Artificial fill, which is mapped at the surface throughout most of Port Hueneme, consists of engineered and/or recently compacted fill related to prior development and as such, it has no paleontological sensitivity (City of Port Hueneme 2021). Per the Port

Hueneme General Plan Update EIR, the project site is underlain entirely by artificial fill. Therefore, no impact would occur.

3.8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant Impact 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?			\boxtimes		
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?					

The California Natural Resources Agency adopted amendments to the CEQA Guidelines on December 30, 2009, which became effective on March 18, 2010. With respect to GHG emissions, the amended CEQA Guidelines state in Section 15064.4(a) that lead agencies should "make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions. Section 15064.7(c) of the CEQA Guidelines specifies that "[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence." Similarly, the revisions to Appendix G, Environmental Checklist Form, which is often used as a basis for lead agencies' selection of significance thresholds, do not prescribe specific thresholds.

Rather, the CEQA Guidelines establish two CEQA thresholds related to GHGs, which will be used in the Air Quality and Greenhouse Gas Memorandum (Appendix A) to discuss the significance of project impacts (14 CCR 15000 et seq., Appendix G).

The CEQA Guidelines do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA (CNRA 2009). The State of California has not adopted emission-based thresholds for GHG emissions under CEQA. The Governor's Office of Planning and Research's Technical Advisory, titled "Discussion Draft CEQA and Climate Change Advisory," states that:

"Neither the CEQA statute nor the CEQA Guidelines prescribe thresholds of significance or particular methodologies for perming an impact analysis. This is left to lead agency judgment and discretion, based upon factual data and guidance from regulatory agencies and other sources where available and applicable. Even in the absence of clearly defined thresholds for GHG emissions, such emissions must be disclosed and mitigated to the extent feasible whenever the

lead agency determines that the project contributes to a significant, cumulative climate change impact" (OPR 2018).

Furthermore, the advisory document indicates that "in the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a 'significant impact,' individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice." Section 15064.7(c) of the CEQA Guidelines specifies that "when adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence."

Amendments to Section 15064.4 of the CEQA Guidelines were adopted to assist lead agencies in determining the significance of the impacts of GHG emissions. Section 15064.4 specifies that a lead agency "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project." Section 15064.4 also provides lead agencies with the discretion to determine whether to assess those emissions quantitatively or to rely on a qualitative analysis or performance-based standards. In addition, the CEQA Guidelines specify that "[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence" (14 CCR 15064.7[c]).

The project is located within the South Central Coast Air Basin (SCCAB) and under the jurisdiction of the VCAPCD which, to date, has not adopted significance thresholds for project level analyses. Therefore, because there is no regional or jurisdiction specific threshold, significance of the project's GHG-related impacts was determined by considering whether the project's GHG emissions meet the 900 metric tons (MT) of CO₂ equivalent (CO₂e) per year screening level threshold identified by the California Air Pollution Control Officers Association (CAPCOA) (CAPCOA 2008). The 900 MT CO₂e per year threshold was developed based on various land use densities and future discretionary project types to determine the size of projects that would likely have a less than cumulatively considerable contribution to climate change. The CAPCOA threshold was developed to ensure capture of 90% or more of likely future discretionary developments with the objective to set the emissions threshold low enough to capture a substantial fraction of future development while setting the emission threshold high enough to exclude small development projects that would contribute a relatively small fraction of cumulative statewide GHG emissions.

Projects that meet or fall below CAPCOA's screening level threshold of 900 MT CO₂e per year of GHG emissions require no further analysis and are not required to implement mitigation measures to reduce GHG emissions. As such, the CAPCOA threshold of 900 MT CO₂e per year is used as a quantitative threshold for the analysis of impacts related to GHG emissions generated by the project.

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

Less-than-Significant Impact. As presented in Appendix A, CalEEMod Version 2020.4.0 was used to calculate the annual greenhouse gas (GHG) emissions based on the construction scenario described in the Air Quality and Greenhouse Gas Memorandum. Construction (demolition, grading and paving) of the project is anticipated to commence in March 2023, and would be completed June 2023. On-site sources of GHG

emissions include off-road equipment, and off-site sources include vendor and haul trucks and worker vehicles. Table 3.8-1 presents construction GHG emissions for the project in 2023 from on-site and off-site emission sources.

Table 3.8-1. Estimated Annual Construction GHG Emissions

	CO ₂	CH ₄	N ₂ O	CO ₂ e
Year	Metric Tons			
2023	54.16	0.02	<0.01	54.77

Notes: <0.01 = value less than reported 0.01. See Appendix A for complete results.

Source: Appendix A

As shown in Table 3.8-1, the estimated total GHG emissions during construction would be approximately 55 MT CO₂e over the construction period. As with project-generated construction air quality pollutant emissions, GHG emissions generated during construction of the project would be short-term in nature, lasting only for the duration of the construction period, and would not represent a long-term source of GHG emissions. Therefore, GHGs generated by the project would not exceed the screening threshold of 900 MT CO₂e per year and the project's GHG emissions would be less than significant.

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

Less-than-Significant Impact. Applicable plans adopted for the purpose of reducing GHG emissions including the SCAG's 2020 RTP/SCS, CARB's Scoping Plan, SB 32, and EO S-3-05. A consistency analysis with these regulations and plans are presented below:

Project Consistency with 2020-2045 RTP/SCS (Connect SoCal)

On September 3, 2020, SCAG's Regional Council formally adopted the 2020 RTP/SCS (Connect SoCal). The SCAG 2020 RTP/SCS is forecast to help California reach its GHG reduction goals by reducing GHG emissions from passenger cars by 8 percent below 2005 levels by 2020 and 19 percent by 2035 in accordance with the most recent CARB targets adopted in March 2018. The 2020 RTP/SCS includes ten goals focused on promoting economic prosperity, improving mobility, protecting the environment, and supporting healthy/complete communities. Furthermore, the 2020 RTP/SCS establishes a land use vision of center-focused placemaking, concentrating growth in and near Priority Growth Areas, transferring of development rights, urban greening, creating greenbelts and community separators, and implementing regional advance mitigation (SCAG 2020). As previously discussed, the project involves only demolition and paving activities, thus many of the goals within the 2020 RTP/SCS are not applicable to the project. Furthermore, the project would not result in significant emissions or a substantial amount of vehicle trip generation or traffic distribution along area roadways. Therefore, the project would not conflict with any of the goals within SCAG's 2020 RTP/SCS.

Project Consistency with CARB's Scoping Plan

The Scoping Plan (approved by CARB in 2008 and updated in 2014 and 2017) provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. The Scoping Plan is not directly applicable to specific

projects, nor is it intended to be used for project-level evaluations.² Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-GWP GHGs in consumer products) and changes to the vehicle fleet (i.e., hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., Low Carbon Fuel Standard), among others. To the extent that these regulations are applicable to the project, the project would comply will all regulations adopted in furtherance of the Scoping Plan to the extent required by law.

Project Consistency with Senate Bill 32 and Executive Order S-3-05

The project would not impede the attainment of the most recent state GHG reduction goals identified in SB 32 and EO S-3-05 and. SB 32 establishes a statewide goal of reducing GHG emissions to 40% below 1990 levels by 2030, while EO S-3-05 establishes a statewide goal of reducing GHG emissions to 80% below 1990 levels by 2050. While there are no established protocols or thresholds of significance for that future year analysis, CARB forecasts that compliance with the current Scoping Plan puts the state on a trajectory of meeting these long-term GHG goals, although the specific path to compliance is unknown (CARB 2014).

CARB has expressed optimism with regard to both the 2030 and 2050 goals. It states in the First Update to the Climate Change Scoping Plan that "California is on track to meet the near-term 2020 GHG emissions limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32" (CARB 2014, p. ES2). With regard to the 2050 target for reducing GHG emissions to 80% below 1990 levels, the First Update to the Climate Change Scoping Plan states the following (CARB 2014, p. 34):

This level of reduction is achievable in California. In fact, if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80% below 1990 levels by 2050. Additional measures, including locally driven measures and those necessary to meet federal air quality standards in 2032, could lead to even greater emission reductions.

In other words, CARB believes that the state is on a trajectory to meet the 2030 and 2050 GHG reduction targets set forth in AB 32, E0 B-30-15, and E0 S-3-05. This is confirmed in the 2017 Scoping Plan, which states the following (CARB 2017):

The Scoping Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while also identifying new, technologically feasible, and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities.

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The Final Statement of Reasons for the amendments to the CEQA Guidelines reiterates the statement in the Initial Statement of Reasons that "[t]he Scoping Plan may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan" (CNRA 2009).

As discussed previously, the project would not conflict with the SCAG's 2020 RTP/SCS and CARB's 2017 Scoping Plan due to the minimal amount of GHG emissions generated by construction activities (demolition, grading, and paving) and because the project would not result in long-term GHG emissions after demolition of the seven buildings. Therefore, the project would not conflict with the state's future GHG targets under SB 32 and EO S-3-05.

Summary

Based on the considerations previously outlined, the project would not generate substantial GHG emissions or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and no mitigation is required. This impact would be less than significant.

3.9 Hazards and Hazardous Materials

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
IX.	HAZARDS AND HAZARDOUS MATERIALS - Wo	ould the project:			
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		\boxtimes		
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 that 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?				

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				

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

and

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

Construction

Less than Significant Impact with Mitigation Incorporated. A variety of hazardous substances and waste would be transported, used, or disposed of during construction (demolition, grading, and paving) of the project. These would include fuels for machinery and vehicles, cleaning solvents, sealants, and storage containing such materials. A significant hazard to the public or the environment could occur because of accidental spills, fires, explosions, or pressure releases involving hazardous materials. However, any transport, use, or disposal of hazardous materials would comply with all applicable federal, state, and local laws regulating the management and use of hazardous materials. For example, hazardous materials would not be disposed of or released onto the ground or any surface water during paving and pavement repair for the project. Further, waste, including trash, littler, garbage, solid waste, petroleum products, and any other potentially hazardous materials would be removed and transported to a permitted waste facility for treatment, storage, or disposal. Accidental spills, leaks, fires, explosions, or pressure releases involving hazardous materials represent a potential threat to human health and the environment if not properly treated. Accident prevention and containment would be the responsibility of the construction contractors, and provisions to properly manage hazardous substances and wastes are typically included in construction specifications. The most likely spills or releases of hazardous materials during construction would involve petroleum products, such as diesel fuel, oils, and lubricants. All storage, handling, and disposal of these materials are regulated by the Department of Toxic Substances Control (DTSC), EPA, and Occupational Safety and Health Administration.

The project would involve demolition of existing buildings onsite. As such, a Phase I Environmental Site Assessment (Phase I) (Appendix D) was prepared for the project to evaluate the conditions of the existing buildings onsite. Under existing conditions, the buildings onsite are used for various commercial and industrial uses. Current occupants utilize the area for various offices, storage and industrial uses including

a biotechnology company and welding shop. Refer to Appendix D for further details regarding the reconnaissance and hazardous materials survey performed for the project. Based on the historic research conducted as part of the Phase I, the majority of the current structures on site were constructed prior to 1977. Structures constructed prior to 1978 may contain lead-based paint (LBP) and structures constructed prior to 1981 may contain asbestos containing building materials (ACBM). Based on the age of the onsite structures which are proposed to be demolished, there is potential that LBP and ACBM were used during construction of these structures.

As stated in Appendix D, to determine if the historic industrial use of the project site has adversely affected the project site, the following mitigation shall be implemented:

HAZ-1: Soil samples shall be collected throughout the site and analyzed for potential contaminants of concern including total petroleum hydrocarbons, VOCs, and total metals.

A hazardous materials contingency plan shall be followed during demolition, excavation, and grading activities for the proposed project. The hazardous materials contingency plan shall include, at a minimum, the following:

- Identification of suspected areas with hazardous waste and/or hazardous materials of concern
- Procedures for temporary cessation of construction activity and evaluation of the level of environmental concern
- Procedures for restricting access to the contaminated area except for properly trained personnel
- Procedures for notification and reporting, including internal management and local agencies (e.g., local Fire Department), as needed
- Health and safety measures for removal and excavation of contaminated soil, if discovered
- Procedures for characterizing and managing excavated soils
- Procedures for certification of completion of remediation
- Regulatory considerations
- Worker health and safety plan for management of contaminated materials
- Site workers shall be familiar with the hazardous materials contingency plan and should be fully trained on how to identify suspected contaminated soil.

HAZ-2: To determine if LBP and ACBM are present in the onsite structures, an LBP and ACBM survey should be conducted.

Asbestos Containing Materials (ABCM): Prior to the start of demolition, an asbestos survey shall be performed by the County of Ventura (County) Department of Environmental Health (DEH), Occupational Health Program (OHP) for all on-site structures that will be demolished. The survey shall cover the entirety of buildings to be demolished, document the location and types of asbestos found, if found, and determine whether any on-site abatement of asbestos-containing materials is necessary. If asbestos is located during the survey, an abatement work plan shall be prepared by the District and approved by County DEH in

compliance with local, state, and federal regulations for removal of such materials. The work plan shall include specifications for the proper removal and disposal of asbestos. The County DEH, OHP, or its designee will monitor project applicant's implementation of the asbestos work plan to ensure that proper controls are implemented and to ensure compliance with the work plan requirements and abatement contractor specifications. Any necessary asbestos sampling and abatement shall be done by a California Occupational Safety and Health Administration (Cal/OSHA)-certified asbestos consultant/contractor and all costs associated with such sampling and abatement shall be paid for by the District.

In addition, the District shall comply with all Ventura County Air Pollution Control District and Cal/OSHA notification requirements pertaining to the disturbance of asbestos-containing materials. When applicable, the District shall make these notifications prior to the activity as follows:

- a. 10-day notification to the Ventura County Air Pollution Control District for renovation/demolition activities. (Note: These are 10 working days; asbestos activities can start on the 11th day. Working days means Monday through Friday, including holidays that fall on these days.)
- b. 24-hour notification to Cal/OSHA.

Lead Based Paint (LBP): Prior to the start of demolition, a lead-based-paint survey shall be performed by a Certified Lead Inspector/Assessor as defined in Title 17, California Code of Regulations, Section 35005, for all on-site structures that will be disturbed by demolition activities in accordance with local, state, and federal regulations. The survey shall cover the entire building to be demolished, document the location and types of lead-based paint found, and determine whether any on-site abatement of lead-based paint is necessary. If lead-based paint is located during the survey, an abatement work plan shall be prepared by the County DEH in compliance with local, state, and federal regulations for any necessary removal of such materials. The work plan shall include specifications for the proper removal and disposal of lead-based paint. The District shall implement the work plan and shall be responsible for payment of all fees and costs associated with preparation and implementation of the work plan. The County DEH, OHP, or its designee will monitor implementation of the lead-based paint work plan to ensure that proper controls are implemented and to ensure compliance with the work plan requirements and abatement contractor specifications.

The District shall retain a California-licensed lead-based-paint abatement contractor, approved by the Count DEH, for the removal work and proper removal methodology as outlined by Cal/OSHA (8 CCR 1529), and all other applicable federal, state, and local regulations regarding the removal, transport, and disposal of lead-containing material shall be applied. The lead-based-paint abatement work plan shall include a monitoring plan to be conducted by a qualified consultant during abatement activities to ensure compliance with the work plan requirements and abatement contractor specifications. The work plan shall include provisions for construction worker training, worker protection, and conducting exposure assessments as needed. As part of the work plan, construction contractors shall

consult federal OSHA regulations (29 CFR 1926.62) and Cal/OSHA regulations (8 CCR 1532.1) regarding lead in construction standards for complete requirements. With incorporation of these mitigation measures, impacts would be less than significant.

Operation

Less-than-Significant Impact. Once operational, the project site would allow for open backlands space offering flexible use options for ongoing District operations. The project would not propose operations which would involve the routine transport, use, or disposal of hazardous materials. Additionally, the project would not propose operations that would potentially release hazardous material into the environment. Per the District's Operations Policy 209, in the event that any hazardous materials and substances are being transported, handled or stored on the project site the Chief Operations Officer or his/her designated representative shall ensure compliance with existing laws and regulations. Any violations shall be reported immediately to the CEO & Port Director (Port of Hueneme 2022). Therefore, impacts would be less than significant.

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

Less-than-Significant Impact. The nearest school to the project site is Port Hueneme Elementary School (354 N 3rd St, Port Hueneme), located approximately 0.6 miles northeast of the project site. As discussed in Section 3.9(a), during construction (demolition, grading, and paving) of the project, potentially hazardous materials would likely be handled on the project site. These materials would include gasoline, diesel fuel, lubricants, and other petroleum-based products required to operate and maintain construction equipment. Per the District's Operations Policy 209, in the event that any hazardous materials and substances are being transported, handled or stored on the project site the Chief Operations Officer or his/her designated representative shall ensure compliance with existing laws and regulations. Any violations shall be reported immediately to the CEO & Port Director (Port of Hueneme 2022). Additionally, project operations would not emit hazardous air emissions or handle hazardous or acutely hazardous materials. Therefore, impacts associated with emitting hazardous emissions or handling hazardous or acutely hazardous materials within one-quarter mile of school would be less than significant.

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

Less-than-Significant Impact. The Hazardous Waste and Substances Sites (Cortese List) is a planning document providing information about the location of hazardous materials release sites. California Government Code Section 65962.5 requires the California EPA to develop, at least annually, an updated Cortese List (CalEPA 2022). The DTSC is responsible for a portion of the information contained in the Cortese List. Other state and local government agencies are required to provide additional hazardous materials release information for the Cortese List. Per the State Water Resources Control Board, Geotracker Map, the project site contains one Leaking Underground Storage Tank (LUST). The LUST's (T0611101139) potential concern was soil contamination by gasoline. The case was opened and assessed on May 5, 1997. However, no cleanup was action was required and the case was closed April 1, 1999 (SWRCB 2022).

Additionally, the DTSC, EnviroStor Map, identifies one cleanup site within the project site. This cleanup site (80000856) is categorized as a site requiring military evaluation. However, this cleanup site is considered inactive since July 1, 2005, and no contaminants of concern are identified (DTSC 2022). Further, the project would not include development; thus, no hazard to the public or environment would occur. Therefore, impacts would be less than significant.

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

No Impact. The nearest airport to the project site is Oxnard Airport, located approximately 3.5 miles north of the project site in the City of Oxnard. As such, the project would not be located within 2 miles of a public airport, and the project site is not within the Airport Influence Area for the airport (Ventura County 2000). Therefore, no impacts associated with airport safety hazards would occur.

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

No Impact. As discussed further in Section 3.17, Transportation, the project would not adversely affect operations on the local or regional circulation system, and as such, would not impede the use of any nearby roadway as an emergency access or evacuation route. During construction (demolition, grading, and paving), emergency vehicles would be able to access the site via the existing Port of Hueneme harbor entrance. Given that the project would not increase the intensification of operations that already occur on the project site, the project would not increase the potential need for emergency personnel. Therefore, no impacts associated with an emergency response plan or emergency evacuation plan would occur.

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

No Impact. The majority of the area surrounding the project site is developed, and as a whole, the project area lacks any lands considered wildlands or wildland-urban interfaces. Per the City General Plan Update EIR, the City is located more than five miles from the nearest State Responsibility Area and Very High Fire Hazard Severity Zone. No lands in the City, including the project site, are subject to wildfire hazards (City of Port Hueneme 2021). According to the California Department of Forestry and Fire Protection's Fire Hazard Severity Zones maps, the project site is neither moderately, highly, nor very highly susceptible to wildland fire (CAL FIRE 2022). Additionally, the project would not propose development that would expose people or structures to a significant risk of loss or death involving wildland fires.

Furthermore, per the District's Operations Policy 209, the Ventura County Fire Protection District (VCFPD) is the District's first responder fire protection agency. The Chief Operations Officer shall serve as liaison to the U. S. Coast Guard and VCFPD on all matters relating to fire prevention, and is responsible for overseeing the District's fire protection program. The Chief Operations Officer or designated representative shall be responsible for ensuring that all required firefighting apparatus is inspected on a regular basis, is in the appropriate place and in operating condition (Port of Hueneme 2022). Therefore, no impacts associated with wildland fires would occur.

3.10 Hydrology and Water Quality

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
X. HYDROLO	GY AND WATER QUALITY – Would th	ne project:			
discharge	y water quality standards or waste requirements or otherwise ally degrade surface or ground lity?			\boxtimes	
supplies o groundwa may impe	ally decrease groundwater or interfere substantially with ter recharge such that the project de sustainable groundwater the basin?				
pattern of the altera river or th	ally alter the existing drainage the site or area, including through tion of the course of a stream or rough the addition of impervious in a manner which would:				
,	in substantial erosion or siltation off-site;				\boxtimes
ar m	ubstantially increase the rate or mount of surface runoff in a nanner which would result in poding on- or offsite;				
w e> dr su	reate or contribute runoff water hich would exceed the capacity of xisting or planned stormwater rainage systems or provide ubstantial additional sources of olluted runoff; or				\boxtimes
iv) in	npede or redirect flood flows?				\boxtimes
	azard, tsunami, or seiche zones, se of pollutants due to project n?				
a water qu	ith or obstruct implementation of uality control plan or sustainable ter management plan?			\boxtimes	

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

Less-than-Significant Impact. Construction (demolition, grading, and paving) associated with the project involves earthwork activities that would potentially disturb soil. Although the project site is already disturbed

and developed, soil erosion could result from such construction activities, thereby potentially affecting the water quality of local downstream waterways.

Because the project would disturb one or more acres of soil, the project is subject to the State Water Resources Control Board National Pollutant Discharge Elimination System Construction General Permit. A Stormwater Pollution Prevention Plan (SWPPP) is required, as part of compliance with the NPDES Permit to ensure that water quality standards are met and that stormwater runoff from the construction work areas does not cause degradation of water quality in receiving water bodies. The SWPPP consists of BMPs designed to reduce and capture soil erosion, under the guidance of a qualified SWPPP practitioner. Sediment control BMPs may include stabilized construction entrances, sediment filters on existing inlets, or the equivalent to reduce erosion impacts. Implementation of the SWPPP and incorporation of BMPs would ensure proper measures are in place to prevent, to the extant feasible, stormwater runoff conveying sediments to downstream receiving waters. Upon completion of the project, the project site would be restored to its pre-construction project conditions, and no loss of topsoil affecting downstream waterways would occur. Furthermore, per Oxnard District Policy 106, the District will strive to manage the environmental impacts of District operations on the local community, consistent with CEOA, as well as applicable local, state and federal regulations, through the implementation of pollution prevention measures and by partnering with vendor and customer that have shared environmental goals (Port of Hueneme 2022). Therefore, impacts associated with water quality standards would be less than significant.

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

No Impact. Under its existing condition, the project site does not have areas that allow for groundwater recharge because the site is disturbed and developed. Upon completion of construction activities (demolition, grading, and paving), the project site would return to similar pre-construction conditions; therefore, existing groundwater recharge would not be affected.

Additionally, given that the project consists of improvements that would not increase the intensification of operations that already occur on the project site, the project would not increase the on-site consumption of domestic water, including water derived from groundwater sources. As such, the project would not decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin. Therefore, no impact would occur.

- c) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
 - i) Result in substantial erosion or siltation on- or 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 which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?
 - iv) Impede or redirect flood flows?

No Impact. The project would demolish seven buildings, as well as remove landscaping and support structures. The demolition would be followed by grading and paving to allow for open backlands space offering flexible use options for ongoing port operations. Upon completion of construction activities (demolition, grading, and paving), the existing on-site and project-adjacent drainage patterns would generally be the same. As a result of the drainage patterns remaining generally the same as existing conditions, the project would not lead to erosion or siltation, increase the rate or amount of surface runoff, create or contribute runoff water that would exceed the capacity of stormwater drainage systems, or impede flood flows. Therefore, no impacts associated with the altering of existing drainage patterns would occur.

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

Less-than-Significant Impact. The project site is located in the District on the east side of the Port of Hueneme harbor entrance. The Pacific Ocean is located directly south of the site. Additionally, the project site is located in a FEMA Flood Zone categorized as Zone X, and the annual chance of flood is 0.2% (FEMA 2008). The project would demolish seven buildings, as well as remove landscaping and support structures. The demolition would be followed by grading and paving to allow for open backlands space offering flexible use options for ongoing port operations. The project would not construct any new structures which would be subject to flood hazard, tsunami, or seiche. Impacts would be less than significant.

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

Less-than-Significant Impact. Refer to responses provided to Impact 3.10(a) and Impact 3.10(b).

3.11 Land Use and Planning

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XI.	LAND USE AND PLANNING - Would the project	ct:			
a)	Physically divide an established community?				\boxtimes
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?				

a) Would the project physically divide an established community?

No Impact. The physical division of an established community typically refers to the construction of a linear feature (such as a major highway or railroad tracks) or removal of a means of access (such as a local road or bridge) that would impair mobility within an existing community or between a community and outlying area. Under the existing condition, the project site is not used as a connection between established communities. Instead, connectivity within the area surrounding the project site is facilitated via local roadways. Therefore, no impacts associated with physical division of an established community would occur.

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

No Impact. The project site is designated as Port in the City of Port Hueneme's General Plan, and is zoned as M-PR (Port-Related Uses). The Port Land Use designation is described as property owned or leased by the Oxnard Harbor District; ship off-loading facilities, warehouses, port-related offices, port-related public open space, and recreation uses, and fuel storage facilities (Port Hueneme 2021). The District's Port Master Plan designates the project site as Aquaculture / Fisheries / Navigation/ Marine Research & Education / Mixed Use Waterfront Complexes. Removal of the buildings on the project site would allow for use o the site as open backlands with increased flexibility and efficiency of ongoing port operations now, such as temporary storage for goods moving through the port, including vehicles, refrigerated containers, fresh fruit, and bulk liquids, as well as temporary storage of truck trailers and drayage trucks. While not a part of this project, the demolition of buildings would reduce the barriers to ostensible future development of aquaculture operations. Removal of these buildings would allow for use as open backlands for ongoing port operations now, and ostensibly future aquaculture operations, which would remain consistent with the adopted land use designation and zoning. The site would continue with Port-Related Uses that would not exclude aquaculture use and/or cargo related uses. As such, the project is consistent with the project site's land use designation and zoning, and thus, the project would not conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project. Therefore, no impacts associated with land use plans, policies, and regulations would occur.

3.12 Mineral Resources

	Potentially Significant Impact	Less Than Significant Impact 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?				

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

and

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

No Impact. The project involves demolition of several buildings associated with former Navy properties. Removal of these buildings would allow for use as open backlands for ongoing port operations now, and ostensibly future aquaculture operations. The site would continue with Port-Related Uses that would not exclude aquaculture use and/or cargo related uses. The project would not include development. The project site is located in the District which falls within the city limits of Port Hueneme. Per the City of Port Hueneme's General Plan Update EIR, there are no known mineral resources or mineral resource extraction sites in the entire City (City of Port Hueneme 2021). Therefore, the project would not result in the loss of a known mineral resource or a mineral resource recovery site; no impact would occur.

3.13 Noise

	Potentially Significant Impact	Less Than Significant Impact 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?			\boxtimes	
b) Generation of excessive groundborne vibration or groundborne noise levels?			\boxtimes	
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?				

a) Would the project result in 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?

Less-than-Significant Impact. Construction noise and vibration levels are temporary phenomena that can vary from hour to hour and day to day. Construction activities (demolition, grading, and paving) shall take place during the permitted time and day per the City's Municipal Code. Per Section 3439 of the Port Hueneme Municipal Code, construction activities are prohibited between the hours of 7:00 p.m. of one day and 7:00 a.m. of the next, Monday through Saturday, and no earlier than 9:00 a.m. or later than 6:00 p.m. on Sunday and federal holidays (City of Port Hueneme 2021). These requirements would limit noise disturbance from construction equipment. Additionally, any noise generated from construction would cease upon completion of construction. Further, the project site is located within the Port of Hueneme, Oxnard Harbor District and is surrounded by commercial, industrial, and military land uses. The project would not be adjacent to a sensitive receptor.

The project would allow for use as open backlands for ongoing District operations now, and ostensibly future aquaculture operations. The site would continue with Port-Related Uses that would not exclude aquaculture use and/or cargo related uses. The project would not construct new buildings or propose operations which would increase noise levels. Impacts would be less than significant.

b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Less-than-Significant Impact. Groundborne vibration (from the use of heavy equipment or other activities) dissipates relatively rapidly through soils. Construction would involve demolition of several buildings, which could result in groundborne vibration or groundborne noise, as well as grading and paving. However, any potential vibration would cease immediately upon completion of construction. Additionally, the project site is located within the District and is surrounded by commercial, industrial, and military land uses where groundborne vibration and groundborne noise may already occur. Further, the project would not involve operational uses that would increase groundborne vibration or groundborne noise levels. Impacts would be less than significant.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The nearest airport to the project site is Oxnard Airport, located approximately 3.5 miles north of the project site in the City of Oxnard. As such, the project would not be located within 2 miles of a public airport, and the project site is not within the Airport Influence Area for the airport (Ventura County 2000). Additionally, no private airstrips are located within the vicinity of the project site. Therefore, no impacts would occur.

3.14 Population and Housing

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. POPULATION AND HOUSING - Would th	e 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?	ng 🗆			

a) Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No Impact. The project involves demolition of several buildings associated with former Navy properties. Removal of these buildings would allow for use as open backlands for ongoing port operations now, and

ostensibly future aquaculture operations. The site would continue with Port-Related Uses that would not exclude aquaculture use and/or cargo related uses. The project would not include development. It is anticipated that the limited number of construction workers needed to develop the project would come from the local labor pool, with additional workers from outside the region not being required. No residential uses are proposed as part of the project, and no additional employees would be required during operations. Therefore, no impacts associated with population growth would occur.

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. While the project would demolish existing buildings, no residential uses exist onsite. As such, the project would not remove people or housing from the site. Therefore, no impact associated with the displacement of existing people or housing would occur.

3.15 Public Services

	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact		
XV. PUBLIC SERVICES						
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:						
Fire protection?				\boxtimes		
Police protection?				\boxtimes		
Schools?				\boxtimes		
Parks?				\boxtimes		
Other public facilities?						

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

Fire protection?

No Impact. Per the District's Operations Policy 209, the Ventura County Fire Protection District (VCFPD) is the District's first responder fire protection agency. The Chief Operations Officer shall serve as liaison to the U. S. Coast Guard and VCFPD on all matters relating to fire prevention and is responsible for overseeing the District's fire protection program. The Chief Operations Officer or designated representative shall be responsible for ensuring that all required firefighting apparatus is inspected on a regular basis, is in the appropriate place and in operating condition (Port of Hueneme 2022).

VCFPD provides fire protection services to the District. The District is served by Fire Station 53, located at 304 N. Second Street. Fire Station 53, through mutual-aid agreements, often responds with the Oxnard and Ventura County Federal Fire Departments. Personnel at Station 53 are trained and equipped for ocean rescue, staffing the local Coast Guard cutter for Emergency Medical Services and the Ventura County Fire Boat-5 (operated by Lifeguards in Channel Islands Harbor) for firefighting. The station is staffed daily by three firefighters, a captain, engineer and medic, which is the size of the crew needed to operate the station's fire engine, which is equipped for residential, commercial, and medical uses. The station also houses a utility pick-up truck that is used in beach rescue work, along with a rescue water craft and an inflatable boat. VCFPD's response time goal is 8.5 minutes 90 percent of the time for all emergency calls. As of 2019, 91% of all emergency calls to VCFPD were responded to within 8.5 minutes. VCFPD is responsible for all fire response dispatch in the County (City of Port Hueneme 2021).

The project site is located approximately 0.5-mile west of Fire Station 53. Based on the proximity of the project site to Fire Station 53, and since the project site is already in the VCFPD service area, it is anticipated that the project could be served by VCFPD without adversely affecting personnel-to-resident ratios, response times, or other performance objectives. Additionally, given that the project would not increase fire risks at the project site, the project would not increase calls for service. Therefore, no impacts would occur.

Police protection?

No Impact. Per the District's Operations Policy 212, the District has developed a Facility Security Plan (FSP) for the commercial seaport facilities in accordance with requirements in 33 CFR 105, as amended and interpreted from time to time by the United State Coast Guard. Facility Security is defined as those measures employed to protect against seizure, sabotage, piracy, pilferage, annoyance or terrorism. It attempts to embrace measures taken to prevent interference with District operations. Additionally, per the 1983 Agreement executed between the City of Port Hueneme and the District, the City of Port Hueneme shall provide additional police services to the District. The City of Port Hueneme Police Department (PHPD) is the District's first responder local law enforcement agency (Port of Hueneme 2022). The PHPD administers public safety in Port Hueneme in the form of administrative, patrol, and investigative services throughout the four beats within the City of Port Hueneme (City of Port Hueneme 2021). The project site is located approximately 0.7-mile west of PHPD (250 N Ventura Road). Thus, because the project would adhere to the FSP and is served by PHPD, it is anticipated that the project could be served without adversely affecting personnel-to-resident ratios, response times, or other performance objectives. Therefore, no impacts would occur.

Schools, Parks, and other public facilities?

No Impact. The project would not result in population growth, and as such, would not increase demands on schools, park and recreation facilities, libraries, community centers, hospitals, or any other public facility. Therefore, no impact associated with schools, parks, or other public facilities would occur.

3.16 Recreation

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XV	I. 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?				

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. Parks in the project vicinity include La Jenelle Park, Dewar Park, and the Port Hueneme Beach Park. The project involves the demolition of a total of approximately 37,500 square feet of developed impervious areas, including removal of seven existing buildings to allow for use as open backlands for ongoing port operations, and ostensibly future aquaculture operations. The site would continue with Port-Related Uses that would not exclude aquaculture use and/or cargo related uses. The project would not involve recreational uses nor allow for an increase in local population that would result in an increase the use of parks or recreation areas. The project would not result in population growth, and as such, would not increase demands on park and recreation facilities. Therefore, no impact associated with recreational facilities would occur.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

No Impact. As described above in Section 3.16(a), the project involves the demolition of existing buildings and developed areas and would not increase the use of existing parks or recreation areas. Potential future uses of the project site include backlands for materials storage in support of ongoing port operations, and future potential aquaculture operations. The site would continue with Port-Related Uses that would not exclude aquaculture use and/or cargo related uses. The project, including potential future uses of the site once the project is completed, does not include recreational facilities or require the construction or expansion of recreational facilities to support its proposed uses. As such, there would be no impact.

3.17 Transportation

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII.	. TRANSPORTATION - Would the project:				
	Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?			\boxtimes	
,	Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?			\boxtimes	
ŕ	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?				\boxtimes

a) Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less-than-Significant Impact. The project would generate temporary construction traffic, which would cease upon completion of construction (demolition, grading, and paving). The project would not construct new development which would alter the existing circulation system. As such, the project would not generate new trips to the project site. Impacts would be less than significant.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

No Impact. CEQA Guidelines Section 15064.3, subdivision (b), focuses on newly adopted criteria (vehicle miles traveled or VMT) adopted pursuant to SB 743 for determining the significance of transportation impacts. Pursuant to SB 743, the focus of transportation analysis changes from vehicle delay to VMT. The related updates to the CEQA Guidelines required under SB 743 were approved on December 28, 2018. As stated in CEQA Guidelines Section 15064.3(c), the provisions of Section 15064.3 shall apply prospectively. A lead agency may elect to be governed by the provision of Section 15064.3 immediately. The provisions must be implemented statewide by July 1, 2020. The City of Port Hueneme has not adopted a formal methodology for VMT (City of Port Hueneme 2021).

The project involves demolition of several buildings associated with former Navy properties. The project would not propose construction of any new structures. The project would not create employment opportunities which would result in the generation of new trips to the site. As such, because the project would not result in new traffic, the project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b). Therefore, no impact would occur.

c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact. The project would not include construction of any new roadways, modifications to any existing roadway or intersection geometry, or temporary road closures during construction (demolition, grading, and paving). The project would be located entirely within the District's boundaries and would not involve improvements within the public right-of-way. Thus, the project would not introduce an incompatible design feature that would impede operations on roadway facilities. Therefore, no impacts associated with hazardous roadway design features would occur.

d) Would the project result in inadequate emergency access?

No Impact. The project would be located entirely within the District's boundaries. Emergency access to the project site will be provided by the existing Port of Hueneme harbor entrance. The project site would be accessible to emergency responders during both project construction (demolition, grading, and paving) and operation. Therefore, impacts associated with inadequate emergency access would not occur.

3.18 Tribal Cultural Resources

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII.	TRIBAL CULTURAL RESOURCES				
a)	Would the project 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		\boxtimes		
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.				

Would the project 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:

a) 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)?

Less-than-Significant Impact with Mitigation Incorporated. Archaeological literature and a records search of the California Historical Resources Information System (CHRIS) database revealed that one archaeological resource has been recorded as overlapping the northwestern portion of the proposed project site. The prehistoric site (CA-VEN-663) was recorded as consisting, at least, of shell midden, an end-battered cobble, fire altered rock, and mammal bones based on one shovel test pit conducted in 1933. CA-VEN-663 is described in the site record as a "canoe camp during the historic phase of the Late Period" intermixed with modern shell deposited by the US Navy. Evidence collected through background research and consultation with local Chumash descendants suggests CA-VEN-663 is likely the site of the historic canoe camp of *Wene'mu* where Chumash would sleep and embark and debark from their watercraft and then travel to the islands (Horne 1980). Richard Van Valkenburgh documents his observations of CA-VEN-663 in his 1933 manuscript Notes on the Ethnography and Archaeology of the Ventureno Chumash Indians that described the site as a midden of blackened sand, clam, cockle and pecten shells and mammal bone extending to a depth of 3 ft. Van Valkenburgh's fieldwork was conducted prior to major development in the area and as such is as close a representation available of the area during prehistoric, protohistoric and historic periods prior to the significant disturbance of the area.

The proposed project site is located entirely on disturbed land within the boundaries of the District. Historic aerials demonstrate that the project site has been developed since at least 1945 and has been subject to continual development to present day. Background research documents that modification of the proposed Project site and surrounding area began in the late 1930s and resulted in a significant change from the natural environment existent when Native American communities occupied the area. The project would involve demolition of some existing buildings and minor grading associated with paving of the project site. Proposed disturbances would not extend deeper than 10 feet. According to the Port Hueneme General Plan Update EIR, the project site is underlain entirely by artificial fill consisting of engineered and/or recently compacted fill related to prior development (City of Port Hueneme 2021). However, the depth of fill soils is uncertain and would overlay native soils that have a potential to include intact cultural deposits that could reveal important information about CA-VEN-663 and the prehistoric, protohistoric and historic periods of human activity in the area.

Based on background research, a search of the CHRIS database revealing a prehistoric archaeological site mapped as overlapping the northwest portion of the proposed Project site, and evidence of fill soils within the proposed project site, the potential for proposed ground disturbances to encounter cultural material within fill soils is low but possible considering the unknown nature or origin of the fill soils. Also based on the evidence revealed, the potential to encounter cultural material within native soils, if disturbed, is moderate to high. Since CA-VEN-663 has been largely destroyed by development prior to the enactment of cultural resource laws aimed at protecting archaeological sites, any remaining intact cultural deposits have a significant potential to reveal important information about the site and about the prehistoric, protohistoric and historic periods of human activity in the area that may currently be unknown and otherwise eluded due

to previous destruction. Therefore, intact cultural deposits of CA-VEN-663, if existent, would likely be eligible for listing in the California Register of Historical Resources (CRHR), or in a local register of historical resources as defined in Public Resources Code section 5020.1(k). As such, mitigation measure TCR-1 in concert with mitigation measures CUL-1 through CUL-3 will ensure that unknown deposits of tribal cultural resources, potentially capable of eligibility for listing in the CRHR, that are inadvertently encountered during project implementation are treated in accordance with CEQA.

- TCR-1. Native American Monitoring. Prior to ground disturbance activities, the Applicant and/or subsequent responsible parties shall retain a Native American/Tribal monitor/entity selected from the list of California Native American Tribes (maintained by the NAHC) and that are traditionally and culturally affiliated with the geographic area of the project site. The Applicant and/or subsequent responsible parties shall make arrangements with the Native American/Tribal monitor/entity to enter into a contract with the intent of securing a total of one Native American/Tribal monitor to be present during initial ground disturbance. Initial ground disturbance is defined as initial construction-related earthmoving of sediments from their place of deposition. As it pertains to cultural resource (archaeological or Native American/Tribal) monitoring, this definition excludes movement of sediments after they have been initially disturbed or displaced by current project-related construction. The Plan created in compliance with CUL-1 shall be provided to the Native American/Tribal monitor/entity under contract prior to commencement of ground disturbing activities. More than one monitor may be required if multiple areas within the project site are simultaneously exposed to initial ground disturbance causing monitoring to be hindered by the distance (more than 200 feet apart) of the simultaneous activities.
- b) 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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less-than-Significant Impact. Based on a list of Tribes from the Native American Heritage commission, notices of the project and inquiry whether consultation is desired, were sent out to (7) Native American tribes by the District in August 2022. The AB 52 process is currently ongoing; this section will be completed upon its completion.

3.19 Utilities and Service Systems

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX	UTILITIES AND SERVICE SYSTEMS - Would th	e project:			
a)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				
b)	Have sufficient water supplies available to serve the project and reasonably 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?				

a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

No Impact. The project involves demolition of several buildings associated with the former Navy property. The demolition would be followed by grading and paving to allow for open backlands space offering flexible use options for ongoing port operations. Given that the project consists of improvements that would not increase the intensification of operations that already occur on the project site, no upsizing, replacement, or relocation of existing utilities and associated infrastructure are anticipated. Therefore, no impacts associated with the relocation of existing or construction of new utilities would occur.

b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

No Impact. Refer to Section 3.19(a).

c) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

No Impact. Refer to Section 3.19(a).

d) Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less-than-Significant Impact. During construction (demolition, grading, and paving) of the project, demolition of existing buildings would result in the generation of construction debris/solid waste. Depending on the type of waste, it could be reused on the project site, transported off site to a permitted recycling facility, or taken to a landfill with available permitted capacity and disposed of appropriately. Regardless, in accordance with AB 939, the construction contractor would ensure that source reduction techniques and recycling measures are incorporated into project construction. Once operational, the project would not result in an increase in solid waste material generated on the project site, given that the project consists of improvements that would not increase the intensification of operations that already occur on site. Therefore, impacts associated with solid waste disposal would be less than significant.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

No Impact. As discussed in Impact 3.19(d), in accordance with AB 939, the construction contractor would ensure that source reduction techniques and recycling measures are incorporated into project construction (demolition, grading, and paving). Once operational, the project would not result in an increase in solid waste material generated on the project site, given that the project consists of improvements that would not increase the intensification of operations that already occur on-site. Therefore, no impacts associated with federal, state, and local solid waste statutes and regulations would occur.

3.20 Wildfire

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XX.	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?				

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				

The District complies with fire regulations issued by the U. S. Coast Guard (which has jurisdiction over the commercial port facilities) and State, County and Local fire rules and regulations. Per the District's Operations Policy 209, the Ventura County Fire District (VCFPD) is the District's first responder fire protection agency. The Chief Operations Officer shall serve as liaison to the U. S. Coast Guard and VCFPD on all matters relating to fire prevention and is responsible for overseeing the District's fire protection program. The Chief Operations Officer or designated representative shall be responsible for ensuring that all required firefighting apparatus is inspected on a regular basis, is in the appropriate place and in operating condition (Port of Hueneme 2022).

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact. As discussed further in Section 3.17, Transportation, the project would not adversely affect operations on the local or regional circulation system, and as such, would not impede the use of any nearby roadway as an emergency access routes. During construction, emergency vehicles would be able to access the site via the existing Port of Hueneme harbor entrance. The project would not propose development that would increase the need for emergency services to the site. Therefore, no impacts associated with an emergency response plan or emergency evacuation plan would occur.

b) Due to slope, prevailing winds, and other factors, would the project exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No Impact. The majority of the area surrounding the project site is developed, and as a whole, the project area lacks any lands considered wildlands or wildland-urban interfaces. Per the City of Port Hueneme General Plan Update EIR, the City is located more than five miles from the nearest State Responsibility Area and Very High Fire Hazard Severity Zone. No lands in the City, including the project site, are subject to

wildfire hazards (City of Port Hueneme 2021). According to the California Department of Forestry and Fire Protection's Fire Hazard Severity Zones maps, the project site is neither moderately, highly, nor very highly susceptible to wildland fire (CAL FIRE 2022). Further, the project would not propose development that would expose people to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Therefore, no impacts would occur.

c) Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact. As stated in response (b), the project site is neither moderately, highly, nor very highly susceptible to wildland fire (CAL FIRE 2022). The project would not require installation or maintenance of associated infrastructure such as fuel breaks, power lines, or other utilities that would exacerbate fire risk. As such, the project would not expose people or structures to significant risk involving wildland fires, exacerbate wildfire risks, or otherwise result in wildfire-related impacts. No impact would occur.

d) Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact. Under existing conditions, the project site is developed. The project involves demolition of several buildings onsite and would not include new development. As stated in response (b), the project site is neither moderately, highly, nor very highly susceptible to wildland fire (CAL FIRE 2022). Additionally, the project site is relatively flat and is not susceptible to landslides. Further, the project site is located in a FEMA Flood Zone categorized as Zone X, and the annual chance of flood is 0.2% (FEMA 2008). As such, the project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post fire instability, or drainage changes. Impacts would not occur.

3.21 Mandatory Findings of Significance

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
XXI	I. 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?				

		Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?		\boxtimes		

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 selfsustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less than Significant Impact with Mitigation Incorporated. As previously discussed in detail in Section 3.4, Biological Resources, Section 3.5, Cultural Resources, and 3.18 Tribal Cultural Resources, the project would not result in significant impacts to biological resources (thresholds b-f) and cultural resources (threshold a), historic resources. However, as discussed in Section 3.4, Biological Resources, impacts to habitat for special status wildlife species (threshold a) would be less than significant with mitigation incorporated (mitigation measures BIO-1 and BIO-2). Additionally, as discussed in Sections 3.5, Cultural Resources (thresholds b and c), and 3.18 Tribal Cultural resources and the potential for significant archeological resources (including tribal cultural resources (threshold a)) exits and mitigation measures CUL-1 through CUL-3 and TCR-1 have been incorporated to reduce impacts to below the level of significance.

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.)

Less-than-Significant Impact with Mitigation Incorporated. When evaluating cumulative impacts, it is important to remain consistent with Section 15064(h) of the CEQA Guidelines, which states that an EIR must be prepared if the cumulative impact may be significant and the project's incremental effect, though individually limited, is cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

Alternatively, a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable through mitigation measures set forth in an MND or if the project will

comply with the requirements in a previously approved plan or mitigation program that provides specific requirements that will avoid or substantially lessen the cumulative problem within the geographic area in which the project is located.

The project would potentially result in project related biological impacts, cultural impacts, and hazards and hazardous materials impacts that could be potentially significant without the incorporation of mitigation. Thus, when coupled with biological and cultural impacts related to the implementation of other related projects throughout the broader project area, the project would potentially result in cumulative-level impacts if these significant impacts are left unmitigated. Impacts associated with hazards and hazardous materials are not generally cumulative because of the differences in facilities, transportation routes, and disposal requirements. While air quality and greenhouse gas are evaluated as cumulative per their respective thresholds, and hazards and hazardous materials no significant impacts have been identified.

With the incorporation of mitigation, the project's impacts to biological resources and cultural resources would be reduced to less-than-significant levels and would not considerably contribute to cumulative impacts in the greater project region. In addition, these other related projects would presumably be bound by their applicable lead agency to (1) comply with all applicable federal, state, and local regulatory requirements; and (2) incorporate all feasible mitigation measures, consistent with CEQA, to further ensure that their potentially cumulative impacts would be reduced to less-than-significant levels.

Although cumulative impacts are always possible, the project, by incorporating all mitigation measures outlined in this IS/Draft MND prepared for the project, would reduce its contribution to any such cumulative impacts to less than cumulatively considerable; therefore, the project would result in individually limited, but not cumulatively considerable, less-than-significant impacts with mitigation incorporated.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant Impact with Mitigation Incorporated. As evaluated throughout this document, the project would have no impact or a less-than-significant impact with respect to most environmental impact areas that address effects on human beings. The exception is hazards and hazardous materials (Section 3.9, thresholds a) and b), because of the age of the structures to be demolished they may contain ACBM and/or LBP. With the incorporation of mitigation measures HAZ-1 and HAZ-2, potential adverse effects on human beings would be less than significant.

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4 References and List of Preparers

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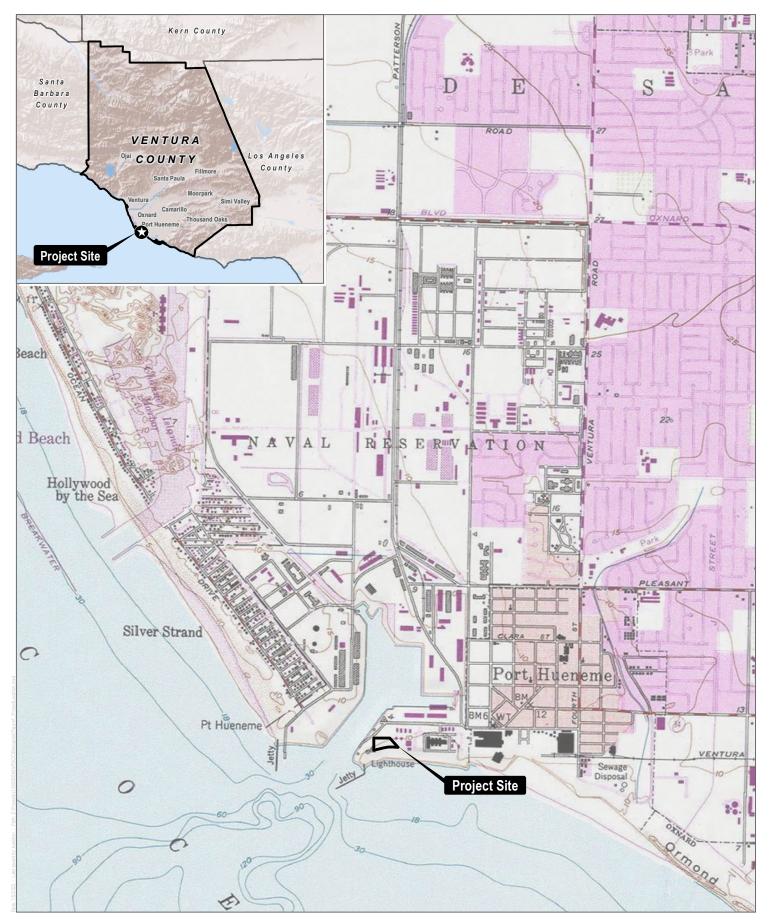
4.2 List of Preparers

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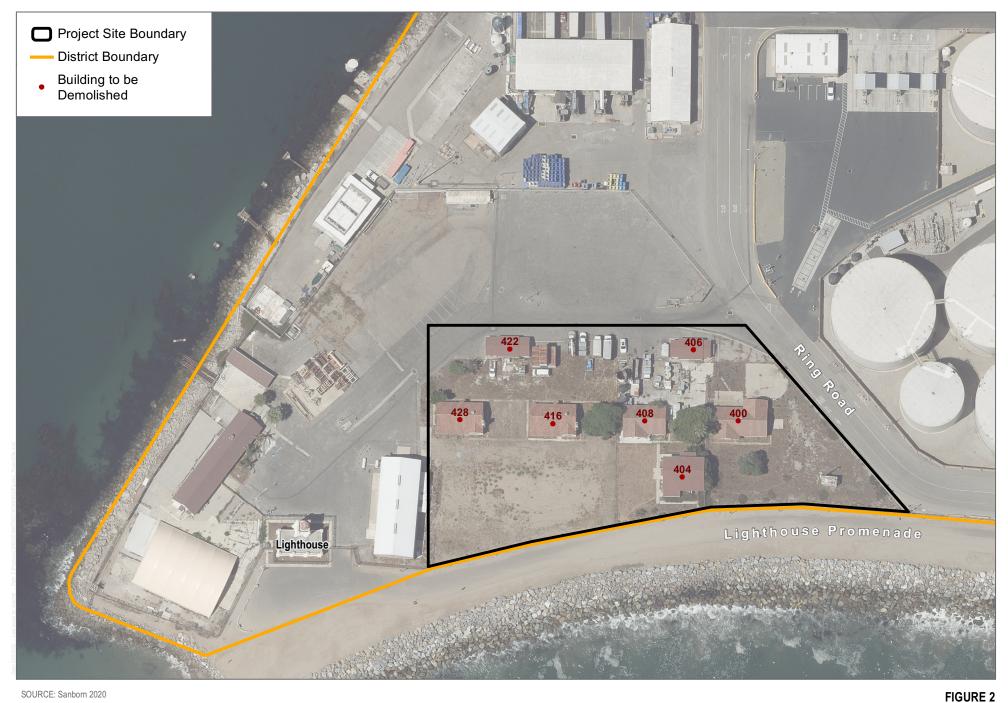
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Sarah Corder, Architectural Historian
Heather McDaniel McDevitt, Archaeologist
Kirsten Zecher, GIS Specialist



SOURCE: USGS Topological Survey, 7.5-Minute Series, Oxnard Quadrangle

FIGURE 1
Project Location

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SOURCE: Sanborn 2020

Project Site

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Appendix A

Air Quality and Greenhouse Gas Emissions Memorandum



MEMORANDUM

To: Christina Birdsey, COO, Port of Hueneme

From: lan McIntire, Dudek

Subject: Former Navy Property Restoration Project, Air Quality and Greenhouse Gas Emissions

Memorandum

Date: August 16, 2022

CC:

Attachment: Attachment A - CalEEMod Output Files

The purpose of this memorandum is to estimate criteria air pollutant and greenhouse gas (GHG) emissions from demolition of the Former Navy Property Restoration Project (project) in the City of Port Hueneme in Ventura (County). Accordingly, this assessment uses the significance thresholds in Appendix G of the California Environmental Quality Act (CEQA) Guidelines (14 CCR 15000 et seq.) and is based on the emissions-based significance thresholds recommended by the Ventura County Air Pollution Control District (VCAPCD). The contents and organization of this memorandum are as follows: (1) project description; (2) general methodology and analysis assumptions, including construction and operation assumptions; (3) air quality assessment, including an overview of criteria air pollutants, thresholds of significance, and impact analysis; (4) GHG emissions assessment, including an overview of GHGs, thresholds of significance, and impact analysis; and (5) references cited.

1 Project Description

1.1 Regional Setting

The project site is located in the City of Port Hueneme in Ventura County. The project is located in the City of Port Hueneme, California. The project site is located within the South Central Coast Air Basin (SCCAB), which encompasses the counties of Ventura, Santa Barbara, and San Luis Obispo.

1.2 Project Overview

The project would demolish existing buildings that can no longer be used and are in a derelict state, in a location that removal of these buildings would allow for use as open backlands for ongoing Port operations now and ostensibly future operations for aquaculture. The Port has identified that discretionary actions for the project include, but may not be limited to, a Coastal/Harbor Development Permit.

The project site is located on approximately 2-acres of developed land and consists of seven buildings constructed between 1939 and circa 1975. Ownership of the buildings was transferred to the Harbor District during the mid-1970s. Since that time they have been used primarily as offices for a variety of marine-related businesses and are currently vacant and in deteriorated condition. The seven buildings to be demolished include the Keepers' Residences (Buildings 416, 422, and 428). These three buildings include two identical single-story residences (416 and 428) and a smaller accessory building (422) constructed as a two-car garage for the residences. Keepers' Residences (Buildings 400, 406, and 408) similarly consists of three buildings with two single-story residences (400 and 408) and a smaller accessory building (406) also constructed as a two-car garage. Finally, building 404 is a rectangular plan, two-story building. The project would demolish a total of approximately 37,500 square feet of developed impervious areas. The proposed disturbance footprint is anticipated to be approximately 1.7 acres and an area of approximately 1.5 acres would be paved after demolition. Demolition and paving are expected to take approximately 90 days total.

Further, the project would be required to comply with VCAPCD Rules 55 and 62.7, which includes measures for the control of fugitive dust during grading and from the disturbance of asbestos-containing material (ACM) in building material during demolition activities.

1.3 Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases. Facilities and structures where these air pollution-sensitive people live or spend considerable amounts of time are known as sensitive receptors. Land uses where air pollution-sensitive individuals are most likely to spend time include schools and schoolyards, parks and playgrounds, daycare centers, nursing homes, hospitals, and residential communities (sensitive sites or sensitive land uses) (California Air Resources Board [CARB] 2005). The VCAPCD identifies sensitive receptors as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses which may include schools, hospitals, and daycare centers (VCAPCD 2003).

The closest off-site sensitive receptors to the project are single-family residences, located approximately 1,650 feet northwest of the project site.

2 General Methodology and Analysis Assumptions

The project is located within the SCCAB and is within the jurisdictional boundaries of the VCAPCD, which has jurisdiction over the County where the project is located. The California Emissions Estimator Model (CalEEMod) Version 2020.4.0 was used to estimate emissions from construction of the project (CAPCOA 2021). CalEEMod is a statewide computer model developed in cooperation with air districts throughout the state to quantify criteria air pollutant and GHG emissions associated with construction activities and operation of a variety of land use projects, such as residential, commercial, and industrial facilities. CalEEMod input parameters, including the land use type used to represent the project and its size, construction schedule, and anticipated use of construction equipment, were based on information provided by the applicant or default model assumptions if project specifics were unavailable.



2.1 Construction

Emissions from the construction and demolition of the project were estimated using CalEEMod. CalEEMod input parameters—including the land use type used to represent the project and its size, construction schedule, phasing, and anticipated use of construction equipment— were based on information provided by the applicant or default model assumptions if project specifics were unavailable. Construction was assumed to commence March 2023 and would last approximately 120 days, ending in August 2023. Approximately 11,008-square-feet of buildings would be demolished. CalEEMod default trip length values for material delivery and haul trips for an urban setting were used for the distances for all construction-related trips. The analysis contained herein is based on the following schedule assumptions.

- Demolition 20 days
- Grading-50 days
- Paving 50 days

Table 1 presents the construction equipment mix used for the air emissions modeling for project which was provided by the applicant. For this analysis, it was generally assumed that heavy construction equipment would be operating at the site for approximately 8 hours a day (or less), 5 days a week (22 days per month) during project construction. Default construction worker trips and vendor truck trips (i.e., delivery trucks) as provided in CalEEMod were utilized. Additional details regarding construction assumptions are provided in the modeling output (Attachment A).

Table 1. Construction Scenario Assumptions

	One-Way Tr	ips				
Construction Phase	Daily Workers	Daily Vendor Trucks	Total Haul Trucks	Equipment	Quantity	Hours Per Day
Demolition	4	4	16	Excavator	1	6
				Rubber Tired Dozer	1	3
				Rubber Tired Loader	1	2
Grading	20	0	0	Grader	1	6
				Rollers	1	6
				Excavator	1	2
				Plate Compactor	1	4
Paving	16	0	0	Other Construction Equipment	1	8
				Paving Equipment	1	8

Notes: See Attachment A for details.



3 Air Quality Assessment

3.1 Air Quality Setting

Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. Criteria air pollutants that are evaluated include reactive organic gases (ROG, also referred to as reactive organic compounds [ROCs] or volatile organic compounds [VOCs]), oxides of nitrogen (NO $_x$), carbon monoxide (CO), sulfur oxides (SO $_x$), particulate matter with an aerodynamic diameter less than or equal to 10 microns in size (coarse particulate matter or PM $_{10}$), and particulate matter with an aerodynamic diameter less than or equal to 2.5 microns in size (fine particulate matter or PM $_{2.5}$). VOCs and NO $_x$ are precursors to ozone (O $_x$). Criteria air pollutant emissions associated with construction of the project were estimated for the following emission sources: operation of off-road construction equipment, paving, architectural coating, on-road vendor (material delivery) and haul trucks, and worker vehicles.

VOCs and NO_x are precursors to O_3 , for which the SCCAB is designated as nonattainment with respect to the National Ambient Air Quality Standards (NAAQS; federal standards) and California Ambient Air Quality Standards (CAAQS). The contribution of VOCs and NO_x to regional ambient O_3 concentrations is the result of complex photochemistry. The increases in O_3 concentrations in the SCCAB due to O_3 precursor emissions tend to be found downwind of the source location because of the time required for the photochemical reactions to occur. Further, the potential for exacerbating excessive O_3 concentrations would also depend on the time of year that the VOC emissions would occur, because exceedances of the O_3 NAAQS and CAAQS tend to occur between April and October when solar radiation is highest. Health effects associated with O_3 include respiratory symptoms, worsening of lung disease leading to premature death, and damage to lung tissue (CARB 2019).

Traffic-congested roadways and intersections have the potential to generate localized high levels of CO. Localized areas where ambient concentrations exceed federal and/or state standards for CO are termed "CO hotspots." The transport of CO is extremely limited, as it disperses rapidly with distance from the source. Under certain extreme meteorological conditions, however, CO concentrations near a congested roadway or intersection may reach unhealthy levels, affecting sensitive receptors. Typically, high CO concentrations are associated with severely congested intersections operating at an unacceptable level of service (LOS) (LOS E or worse is unacceptable). Projects contributing to adverse traffic impacts may result in the formation of a CO hotspot. Additional analysis of CO hotspot impacts would be conducted if a project would result in a significant impact or contribute to an adverse traffic impact at a signalized intersection that would potentially subject sensitive receptors to CO hotspots. Health effects associated with CO include chest pain in patients with heart disease, headache, light-headedness, and reduced mental alertness (CARB 2019).

Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. $PM_{2.5}$ and PM_{10} represent fractions of particulate matter. Coarse particulate matter (PM_{10}) consists of particulate matter that is 10 microns or less in diameter, which is about 1/7 the thickness of a human hair. Major sources of PM_{10} include crushing or grinding operations; dust



stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions. Fine particulate matter ($PM_{2.5}$) consists of particulate matter that is 2.5 microns or less in diameter, which is roughly 1/28 the diameter of a human hair. $PM_{2.5}$ results from fuel combustion (e.g., from motor vehicles and power generation and industrial facilities), residential fireplaces, and woodstoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as sulfur oxides (SO_x), NO_x , and VOCs. Health effects associated with PM_{10} include premature death and hospitalization, primarily for worsening of respiratory disease (CARB 2019).

Toxic Air Contaminants

In addition to impacts from criteria pollutants, project impacts may include emissions of pollutants identified by the state and federal government as toxic air contaminants (TACs) or hazardous air pollutants. State law has established the framework for California's TAC identification and control program, which is generally more stringent than the federal program and aimed at TACs that are a problem in California. The state has formally identified more than 200 substances as TACs, including the federal hazardous air pollutants, and is adopting appropriate control measures for sources of these TACs. The following measures are required by state law to reduce diesel particulate emissions:

- Fleet owners of mobile construction equipment are subject to the CARB Regulation for In-Use Off-road Diesel Vehicles (Title 13 California Code of Regulations, Chapter 9, Section 2449), the purpose of which is to reduce diesel particulate matter (DPM) and criteria pollutant emissions from in-use (existing) off-road diesel-fueled vehicles.
- All commercial diesel vehicles are subject to Title 13, Section 2485 of the California Code of Regulations, limiting engine idling time. Idling of heavy-duty diesel construction equipment and trucks during loading and unloading shall be limited to 5 minutes; electric auxiliary power units should be used whenever possible.

3.2 Regulatory Setting

Federal

Federal Clean Air Act

The federal Clean Air Act passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The U.S. Environmental Protection Agency (EPA) is responsible for implementing most aspects of the Clean Air Act, including the setting of NAAQS for major air pollutants, hazardous air pollutant (HAP) standards, approval of state attainment plans, motor vehicle emission standards, stationary source emissions standards and permits, acid rain control measures, stratospheric O₃ protection, and enforcement provisions. Federal standards are established for criteria pollutants under the Clean Air Act, which are O₃, CO, NO₂, SO₂, PM₁₀, PM_{2.5}, and lead.

The federal standards describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The federal standards (other than for O₃, NO₂, SO₂, PM₁₀, PM_{2.5}, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. Federal standards for O₃, NO₂, SO₂, PM₁₀, and PM_{2.5} are based on statistical calculations over 1- to 3 year periods, depending on the pollutant. The Clean Air Act requires the EPA to reassess the federal standards at least every 5 years to determine whether



adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the federal standards must prepare a state implementation plan that demonstrates how those areas will attain the standards within mandated time frames.

The federal Clean Air Act delegates the regulation of air pollution control and the enforcement of the federal standards to the states. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels.

State

California Clean Air Act

The federal Clean Air Act delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for ensuring implementation of the California Clean Air Act of 1988, responding to the federal Clean Air Act, and regulating emissions from motor vehicles and consumer products.

CARB has established CAAQS, which are generally more restrictive than the NAAQS. As stated previously, an ambient air quality standard defines the maximum amount of a pollutant averaged over a specified period of time that can be present in outdoor air without harm to the public's health. For each pollutant, concentrations must be below these relevant CAAQS before a basin can attain the corresponding CAAQS. Air quality is considered "in attainment" if pollutant levels are continuously below the CAAQS and violate the standards no more than once each year. The CAAQS for O₃, CO, SO₂ (1-hour and 24-hour), NO₂, PM₁₀, and PM_{2.5} and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded.

California air districts have based their thresholds of significance for California Environmental Quality Act (CEQA) purposes on the levels that scientific and factual data demonstrate that the air basin can accommodate without affecting the attainment date for the NAAQS or CAAQS. Since an ambient air quality standard is based on maximum pollutant levels in outdoor air that would not harm the public's health, and air district thresholds pertain to attainment of the ambient air quality standard, this means that the thresholds established by air districts are also protective of human health.

All others are not to be equaled or exceeded. The NAAQS and CAAQS are presented in Table 2.

Table 2. Ambient Air Quality Standards

		California Standardsa	National Standards ^b		
Pollutant	Averaging Time	Concentration ^c	Primary ^{c,d}	Secondary ^{c,e}	
03	1 hour	0.09 ppm (180 μg/m³)	_	Same as Primary	
	8 hours	0.070 ppm (137 μg/m³)	0.070 ppm (137 μg/m³) ^f	Standard ^f	



Table 2. Ambient Air Quality Standards

		California Standardsa	National Standards ^b		
Pollutant	Averaging Time	Concentrationc	Primary ^{c,d}	Secondary ^{c,e}	
NO ₂ g	1 hour	0.18 ppm (339 μg/m³)	0.100 ppm (188 μg/m³)	Same as Primary Standard	
	Annual Arithmetic Mean	0.030 ppm (57 μg/m ³)	0.053 ppm (100 μg/m³)		
CO	1 hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	None	
-	8 hours	9.0 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)		
SO ₂ h	1 hour	0.25 ppm (655 μg/m³)	0.075 ppm (196 μg/m³)	_	
	3 hours	_	_	0.5 ppm (1,300 μg/m³)	
	24 hours	0.04 ppm (105 μg/m ³)	0.14 ppm (for certain areas) ^g	_	
	Annual	_	0.030 ppm (for certain areas) ^g	_	
PM_{10}^{i}	24 hours	50 μg/m ³	150 μg/m³	Same as Primary	
	Annual Arithmetic Mean	20 μg/m ³	_	Standard	
PM _{2.5} i	24 hours	_	35 μg/m³	Same as Primary Standard	
	Annual Arithmetic Mean	12 μg/m³	12.0 μg/m³	15.0 μg/m ³	
Lead ^{j,k}	30-day Average	1.5 μg/m ³	_	_	
	Calendar Quarter	_	1.5 μg/m³ (for certain areas) ^k	Same as Primary Standard	
	Rolling 3-Month Average	_	0.15 μg/m ³		
Hydrogen sulfide	1 hour	0.03 ppm (42 µg/m ³)	_	_	
Vinyl chloride ^j	24 hours	0.01 ppm (26 µg/m ³)	_	_	
Sulfates	24 hours	25 μg/m ³	_	_	
Visibility reducing particles	8 hours (10:00 a.m. to 6:00 p.m. PST)	Insufficient amount to produce an extinction coefficient of 0.23 per kilometer due to the number of particles when the relative humidity is less than 70%	_	_	

Source: CARB 2016.

Notes: $\mu g/m^3$ = micrograms per cubic meter; mg/m^3 = milligrams per cubic meter; ppm = parts per million by volume; O_3 = ozone; NO_2 = nitrogen dioxide; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = particulate matter with an aerodynamic diameter less than or equal to 10 microns; $PM_{2.5}$ = particulate matter with an aerodynamic diameter less than or equal to 2.5 microns.



- California standards for O₃, CO, SO₂ (1-hour and 24-hour), NO₂, suspended particulate matter (PM₁₀, PM_{2.5}), and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. CAAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
- National standards (other than O₃, NO₂, SO₂, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once per year. The O₃ standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 μg/m³ is equal to or less than 1. For PM_{2.5}, the 24-hour standard is attained when 98% of the daily concentrations, averaged over 3 years, are equal to or less than the standard.
- Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
- d National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.
- National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
- f On October 1, 2015, the national 8-hour O₃ primary and secondary standards were lowered from 0.075 to 0.070 ppm.
- To attain the national 1-hour standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (ppb). Note that the national 1-hour standard is in units of ppb. California standards are in units of ppm. To directly compare the national 1-hour standard to the California standards, the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
- On June 2, 2010, a new 1-hour SO₂ standard was established, and the existing 24-hour and annual primary standards were revoked. To attain the national 1-hour standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standard, except that in areas designated nonattainment of the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
- On December 14, 2012, the national annual PM_{2.5} primary standard was lowered from 15 μg/m³ to 12.0 μg/m³. The existing national 24-hour PM_{2.5} standards (primary and secondary) were retained at 35 μg/m³, as was the annual secondary standard of 15 μg/m³. The existing 24-hour PM₁₀ standards (primary and secondary) of 150 μg/m³ were also retained. The form of the annual primary and secondary standards is the annual mean averaged over 3 years.
- CARB has identified lead and vinyl chloride as TACs with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- The national standard for lead was revised on October 15, 2008, to a rolling 3-month average. The 1978 lead standard (1.5 μg/m³ as a quarterly average) remains in effect until 1 year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

Regional/Local

Ventura County Air Pollution Control District

As previously discussed, the VCAPCD is the regional agency responsible for the regulation and enforcement of federal, state, and local air pollution control regulations in Ventura County, where the project is located. The VCAPCD has adopted Air Quality Assessment Guidelines (2003) for quantifying and determining the significance of air quality emissions. Thresholds of significance contained in the Air Quality Assessment Guidelines are discussed in Section 3.3.

The VCAPCD adopted the 2016 Ventura County Air Quality Management Plan (AQMP) to demonstrate a strategy for and reasonable progress toward attainment of the federal 8-hour ozone standard. The 2016 Ventura County AQMP relies on the Southern California Association of Governments' (SCAG) 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) forecasts of regional population growth in its projections for managing Ventura County's air quality. The 2016 Ventura County AQMP's overall control strategy is an integral approach relying on fair-share emission reductions from federal, state, and local levels. The 2016 Ventura County AQMP is composed of stationary and mobile source emission reductions from traditional regulatory control measures, incentive-based programs,



mobile source strategies, and reasonably available control measures (VCAPCD 2017). The control strategies are to be implemented in partnership with CARB and the EPA.

Applicable Rules

Emissions that would result from stationary and area sources during operation under the project may be subject to VCAPCD rules and regulations. The VCAPCD rules applicable to the project may include the following:

Regulation IV - Prohibitions

- Rule 51 Nuisance: This rule prohibits any person from discharging air contaminants or any other material from a source that would cause injury, detriment, nuisance, or annoyance to any considerable number of persons or the public or which endangers the comfort, health, safety, or repose to any considerable number of persons or the public. This rule would apply for all construction activities.
- Rule 55 Fugitive Dust: This rule requires projects to prevent, reduce or mitigate fugitive dust emissions from a site. Rule 55 restricts visible fugitive dust to the project property line and restricts the tracking out of bulk materials onto public roads. Additionally, projects must utilize the control measures (identified in the tables within the rule), which may include watering, using chemical stabilizers and/or ceasing all activities. The rule would apply during grading activities.
- Rule 55.1 Paved Roads and Public Unpaved Roads: This rule requires fugitive dust generators to begin the removal of visible roadway accumulation within 72 hours of any written notification from the VCAPCD. The use of blowers is expressly prohibited under any circumstances. This rule also requires controls to limit the amount of dust from any construction activity or any earthmoving activity on a public unpaved road. This rule would apply for all construction activities.
- Rule 55.2 Street Sweeping Equipment: This rule requires the use of PM₁₀ efficient street sweepers for routine street sweeping and for removing vehicle track-out pursuant to Rule 55. This rule would apply for all construction activities.
- Rule 62.7 (Asbestos Demolition and Renovation: This rule applies to demolition and renovation
 operations and the associated disturbance of ACM in building material. The rule would apply during
 demolition activities.

South Central Coast Air Basin Attainment Designation

Pursuant to the 1990 federal Clean Air Act Amendments, the U.S. Environmental Protection Agency (EPA) classifies air basins (or portions thereof) as "attainment" or "nonattainment" for each criteria air pollutant, based on whether the National Ambient Air Quality Standards (NAAQS) have been achieved. Generally, if the recorded concentrations of a pollutant are lower than the standard, the area is classified as "attainment" for that pollutant. If an area exceeds the standard, the area is classified as "nonattainment" for that pollutant. As previously discussed, these standards are set by the EPA or CARB for the maximum level of a given air pollutant that can exist in the outdoor air without unacceptable effects on human health or the public welfare. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated as "unclassified" or "unclassifiable." The designation of "unclassifiable/attainment" means that the area meets the standard or is expected to be meet the standard despite a lack of monitoring data. Areas that achieve the standards after a nonattainment designation are redesignated as maintenance areas and must have approved Maintenance Plans



to ensure continued attainment of the standards. The California Clean Air Act, like its federal counterpart, called for the designation of areas as "attainment" or "nonattainment," but based on CAAQS rather than the NAAQS.

The criteria pollutants of primary concern that are considered in this analysis are O_3 , NO_2 , CO, SO_2 , PM_{10} , and $PM_{2.5}$. Although there are no ambient standards for VOCs or NO_x , they are important as precursors to O_3 . The SCCAB is currently designated nonattainment for PM_{10} under the CAAQS. It is designated attainment for the CAAQS for O_3 , CO, PM_{10} , NO_2 , SO_2 , lead, and sulfates. The SCCAB is designated attainment for all NAAQS.

Table 3 summarizes Ventura County's federal and state attainment designations for each of the criteria pollutants.

Table 3. Ventura County Attainment Classification

Pollutant	Federal Designation ^{a,b}	State Designation ^c
O ₃ (1-hour)	Attainment ^d	Nonattainment
O ₃ (8-hour)	Nonattainment	Nonattainment
CO	Attainment (Maintenance)	Attainment
PM ₁₀	Unclassifiable/Attainment	Nonattainment
PM _{2.5}	Unclassifiable/Attainment	Unclassified
NO ₂	Unclassifiable/Attainment	Attainment
SO ₂	Unclassified	Attainment
Leade	Unclassifiable/Attainment	Attainment
Sulfates	(no federal standard)	Attainment
Hydrogen Sulfide	(no federal standard)	Attainment
Visibility-Reducing Particles	(no federal standard)	Unclassified
Vinyl chloride ^e	No federal standard	No designation

Notes:

- a CARR 2020
- b At the time of designation, if the available data does not support a designation of attainment or nonattainment, the area is designated as unclassifiable.
- c CARB 2020.
- ^d The federal 1-hour standard of 0.12 ppm was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in SIPs.
- e CARB has identified lead and vinyl chloride as toxic air contaminants with no threshold level of exposure for adverse health effects determined.

3.3 Thresholds of Significance

The significance criteria used to evaluate the project impacts to air quality is based on the recommendations provided in Appendix G of the CEQA Guidelines. For the purposes of this air quality analysis, a significant impact would occur if the project would (14 CCR 15000 et seq.):

- 1. Conflict with or obstruct implementation of the applicable air quality plan.
- 2. 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.
- 3. Expose sensitive receptors to substantial pollutant concentrations.
- 4. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.



Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) indicates that, where available, the significance criteria established by the applicable air quality management district or pollution control district may be relied upon to determine whether the project would have a significant impact on air quality. The VCAPCD (2003) has adopted Air Quality Assessment Guidelines for quantifying and determining the significance of air quality emissions. Thresholds of significance contained in the Air Quality Assessment Guidelines include:

- The VCAPCD considers operational air quality impacts to be significant if the project would generate more than 25 pounds per day of the ozone precursors ROC or NO_x.
- The VCAPCD states that construction-related emissions of ROC and NO_x are not counted toward the two significance thresholds above, since these emissions are temporary. However, construction-related emissions should be mitigated if estimates of ROC and NO_x emissions from the heavy-duty construction equipment anticipated to be used for a particular project exceed the 25 pounds per day threshold.
- A project with operational emissions in excess of two pounds per day of ROC or NO_x that is found
 inconsistent with the Air Quality Management Plan (AQMP) would have a cumulatively considerable
 contribution to a significant cumulative air quality impact. Inconsistent projects are typically those that
 cause the existing population to exceed the population forecasts contained in the most recently adopted
 AQMP.
- The VCAPCD has not established quantitative thresholds for particulate matter for either construction or operation. However, the VCAPCD states a project would have a significant impact if it would be reasonably expected to generate fugitive dust emissions in such quantities as to cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which may endanger the comfort, repose, health, or safety of any such person or the public. The VCAPCD recommends implementation of fugitive dust measures described in Section 7.4.1 of the Air Quality Assessment Guidelines as part of all project-related dust generating operations and activities.
- A project would result in significant impacts from odor emissions if it may reasonably be expected to
 generate odorous emissions in such quantities as to cause detriment, nuisance, or annoyance to any
 considerable number of persons or to the public, or which may endanger the comfort, repose, health, or
 safety of any such person or the public, or which may cause, or have a natural tendency to cause, injury or
 damage to business or property.
- A project would result in cancer risk to the maximum exposed individual greater than 10 in one million and
 the ground-level concentrations of non-carcinogenic toxic air pollutants would result in a hazard index of
 greater than 1.

3.4 Air Quality Impact Analysis

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

The VCAPCD Assessment Guidelines discuss how a project can be found consistent with the applicable AQMP. The applicable AQMP for the project area is the 2016 AQMP, adopted by the VCAPCD in 2017. According to the VCAPCD Assessment Guidelines, a project with estimated emissions of 2 pounds per day or greater of ROC or 2 pounds per day or greater of NO_x that is found to be inconsistent with the AQMP will also have a significant cumulative adverse



air quality impact. There are four steps to determining consistency with the AQMP for projects located in growth areas:

- Determine whether the project conforms to the applicable General Plan;
- Determine the current estimated population of the growth area;
- Compare the current estimated population of the growth area population target for the next year. If the
 current estimated population of the growth area is below its next year's population target, and the project
 conforms to the applicable General Plan designation, the project is determined to be consistent with the
 AQMP;
- If the current estimated population of the growth areas exceeds its next year's population target, the project should be found to be inconsistent with the AMQP. Inconsistency with the AQMP is considered a significant cumulative adverse air quality impact.

As discussed under the second impact criterion below, the project would not exceed 2 pounds per day of ROC emissions; however, the project would exceed 2 pounds per day of NOx emissions. The project is consistent with the existing land use designation and does not propose a change in land use designation. Accordingly, the project would not conflict with the SCAG RTP/SCS forecasts used in the AQMP development. In addition, the project does not propose additional land for development, nor would it induce additional population in the project area. Because the project would involve only the demolition of existing buildings, there would not be an increase in population in the region associated with its implementation. Accordingly, the project is consistent with the AQMP. As a result, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Level of Significance after Mitigation

Impacts would be less than significant; therefore, no mitigation is required.

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

Air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and the VCAPCD develops and implements plans for future attainment of ambient air quality standards. Based on these considerations, project-level thresholds of significance for criteria pollutants are used in the determination of whether a project's individual emissions would have a cumulatively considerable contribution on air quality. If a project's emissions would exceed the VCAPCD significance thresholds, it would be considered to have a cumulatively considerable contribution, and thus have a significant adverse impact on air quality in Ventura County (VCAPCD 2003). This impact evaluation focuses on regional mass daily criteria air pollutant emissions; therefore, this assessment evaluates the project actions on the whole similar to the threshold analyzed above in the previous impact criterion.



A quantitative analysis was conducted to determine whether proposed construction activities would result in a cumulatively considerable net increase in emissions of criteria air pollutants for which the SCCAB is designated as nonattainment under the NAAQS or CAAQS.

The following discussion quantitatively evaluates project-generated impacts associated with construction of the project.

Construction Emissions

Proposed construction activities would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment and soil disturbance) and off-site sources (i.e., on-road haul trucks, delivery trucks, and worker vehicle trips). Construction emissions can vary substantially from day to day, depending on the level of activity; the specific type of operation; and, for dust, the prevailing weather conditions. Therefore, such emission levels can only be approximately estimated with a corresponding uncertainty in precise ambient air quality impacts.

Table 4 presents the estimated maximum daily construction emissions generated during construction of the project. The values shown are the maximum summer or winter daily emissions results from CalEEMod. Details of the emission calculations are provided in Attachment A.

Table 4. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions - Unmitigated

	ROC	NO _x	СО	S0 _x	PM ₁₀	PM _{2.5}
Year	Pounds per	day				
2023	0.61	5.30	6.73	0.01	0.52	0.26
VCAPCD Threshold	25	25	N/A	N/A	N/A	N/A
Threshold exceeded?	No	No	No	No	No	No

Notes: ROC = reactive organic compounds; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine partic

As shown in Table 4, daily construction emissions would not exceed the VCAPCD significance thresholds for ROC or NO_x during project construction. Notably, the VCAPCD has not established quantitative thresholds for particulate matter for either construction or operation. However, the VCAPCD states a project would have a significant impact if it would be reasonably expected to generate fugitive dust emissions in such quantities as to cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which may endanger the comfort, repose, health, or safety of any such person or the public. Therefore, the VCAPCD recommends implementation of fugitive dust measures described in Section 7.4.1 of the Air Quality Assessment Guidelines as part of all project-related dust generating activities.

Fugitive dust reduction measures presented within the VCAPCD Guidelines include the following:

1. The area disturbed by clearing, grading, earth moving, or excavation operations shall be minimized to prevent excessive amounts of dust.



- **MEMORANDUM**
 - 2. Pre-grading/excavation activities shall include watering the area to be graded or excavated before commencement of grading or excavation operations. Application of water (preferably reclaimed, if available) should penetrate sufficiently to minimize fugitive dust during grading activities.
 - 3. Fugitive dust produced during grading, excavation, and construction activities shall be controlled by the following activities:
 - a) All trucks shall be required to cover their loads as required by California Vehicle Code §23114.
 - b) All graded and excavated material, exposed soil areas, and active portions of the construction site. including unpaved on-site roadways, shall be treated to prevent fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally-safe soil stabilization materials, and/or roll-compaction as appropriate. Watering shall be done as often as necessary and reclaimed water shall be used whenever possible.
 - 4. Graded and/or excavated inactive areas of the construction site shall be monitored by (indicate by whom) at least weekly for dust stabilization. Soil stabilization methods, such as water and roll-compaction, and environmentally-safe dust control materials, shall be periodically applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area should be seeded and watered until grass growth is evident, or periodically treated with environmentally-safe dust suppressants, to prevent excessive fugitive dust.
 - 5. Signs shall be posted on-site limiting traffic to 15 miles per hour or less.
 - 6. During periods of high winds (i.e., wind speed sufficient to cause fugitive dust to impact adjacent properties), all clearing, grading, earth moving, and excavation operations shall be curtailed to the degree necessary to prevent fugitive dust created by on-site activities and operations from being a nuisance or hazard, either off-site or on-site. The site superintendent/supervisor shall use his/her discretion in conjunction with the VCAPCD in determining when winds are excessive.
 - 7. Adjacent streets and roads shall be swept at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.
 - 8. Personnel involved in grading operations, including contractors and subcontractors, should be advised to wear respiratory protection in accordance with California Division of Occupational Safety and Health regulations.

As previously discussed, Ventura County has been designated as a federal and state nonattainment area for O₃ and state PM10. The nonattainment status is the result of cumulative emissions from various sources of air pollutants and their precursors within Ventura County, including motor vehicles, off-road equipment, and commercial and industrial facilities. Construction and operational activities of the project would generate ROC and NO_x emissions (precursors to O₃) and emissions of PM₁₀ and PM_{2.5}. However, as indicated in Table 4, projectgenerated emissions resulting from construction would not exceed the VCAPCD significance thresholds for ROC and NOx.

Cumulative localized impacts would potentially occur if a project were to occur concurrently with another off-site project. Schedules for potential future projects near the project component areas are currently unknown; therefore, potential impacts associated with two or more simultaneous projects would be considered speculative. However, future projects would be subject to CEQA and would require air quality analysis and, where necessary, mitigation.

The CEQA Guidelines state that if a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact (14 CCR 15145).



Criteria air pollutant emissions associated with construction activity of future projects would be reduced through implementation of control measures required by the VCAPCD. Cumulative PM₁₀ and PM_{2.5} emissions would be reduced because all future projects would be subject to VCAPCD Rule 55 (Fugitive Dust), which sets forth general and specific requirements for all sites in the VCAPCD. In addition, the VCAPCD Guidelines includes fugitive dust reduction measures which projects must implement to reduce dust generating activities

Therefore, based on the above considerations, the project would not result in a cumulatively considerable increase in emissions of nonattainment pollutants, and impacts would be **less than significant** during construction.

Mitigation Measures

No mitigation is required.

Level of Significance after Mitigation

Impacts would be less than significant; therefore, no mitigation is required.

Would the project expose sensitive receptors to substantial pollutant concentrations?

People most likely to be affected by air pollution include children, the elderly, and people with cardiovascular and chronic respiratory diseases. According to the VCAPCD, sensitive receptors include residences, schools, hospitals, and daycare centers (VCAPCD 2003). The closest off-site sensitive receptors to the project are single-family residences, located approximately 1,650 feet northwest of the project site.

Health Impacts of Toxic Air Contaminants

The greatest potential for TAC emissions during construction would be diesel particulate emissions from heavy equipment operations and heavy-duty trucks during construction of the project and the associated health impacts to sensitive receptors. The closest sensitive receptors is an existing residence located 1,650 feet northwest of the project site. Total project construction would last approximately 120 days, after which project-related TAC emissions would cease. According to the Office of Environmental Health Hazard Assessment, health risk assessments (which determine the exposure of sensitive receptors to toxic emissions) should be based on a 30-year exposure period for the maximally exposed individual receptor; however, such assessments should also be limited to the period/duration of activities associated with the project. A 120-day construction schedule represents a short duration of exposure (approximately 1% of a 30-year exposure period) while cancer and chronic risk from DPM are typically associated with long-term exposure. Thus, the project would not result in a long-term source of TAC emissions. Furthermore, the project would not require the extensive use of heavy-duty construction equipment or diesel trucks over the duration of construction, which would limit the exposure of any proximate individual sensitive receptor to TACs.

No residual TAC emissions and corresponding cancer risk are anticipated after demolition of the seven buildings. Thus, the project would not result in a long-term (i.e., 9-year, 30-year, or 70-year) source of TAC emissions. Therefore, the exposure of project-related TAC emission impacts to sensitive receptors would be less than significant.



Health Impacts of Carbon Monoxide

The VCAPCD recommends a CO hotspot screening analysis use the screening procedure in Caltrans' CO Protocol should be conducted for any project with indirect emissions greater than the applicable ozone project significance thresholds in Section 3.3.1 of the Ventura County Air Quality Assessment Guidelines, that may significantly impact roadway intersections that are currently operating at, or are expected to operate at, Levels of Service E, or F. A CO hotspot screening analysis should also be conducted for any project-impacted roadway intersection at which a CO hotspot might occur. During construction of the project, construction traffic would affect the intersections near the project site. However, the project would be temporary and would not be a source of daily, long-term mobile-source emissions. In addition, due to continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SCCAB is steadily decreasing. Furthermore, the project would not result in operational activities because the project would consist of vacant land once complete. Therefore, the project would not generate additional traffic volumes that would result in CO hot spots. This impact would be **less than significant**.

Health Effects of Criteria Air Pollutants

Construction emissions of the project would not exceed the VCAPCD thresholds for any criteria air pollutants, including ROC and NO_x .

Due to the lack of quantitative methods to assess this complex photochemistry, the holistic effect of a single project's emissions of O_3 precursors is speculative. That being said, because the project would not exceed the VCAPCD thresholds, the project would not contribute to health effects associated with O_3 .

Because project-related NO_x emissions would not exceed the VCAPCD thresholds, and because Ventura County is a designated attainment area for NO₂ (and NO₂ is a constituent of NO_x) and the existing NO₂ concentrations in the area are well below the NAAQS and CAAQS standards, it is not anticipated that the project would cause an exceedance of the NAAOS and CAAQS for NO₂ or result in potential health effects associated with NO₂ and NO_x.

CO tends to be a localized impact associated with congested intersections. The associated potential for CO hotspots is discussed below (in the potential to expose sensitive receptors to substantial pollutant concentrations evaluation) and determined to be less than significant. Thus, the project's CO emissions would not contribute to significant health effects associated with CO.

The project would be required to implement fugitive dust reduction measures as specified in the VCAPCD Guidelines to limit PM_{10} or $PM_{2.5}$ emissions. Therefore, the project would not contribute to exceedances of the NAAQS and CAAQS for particulate matter and would not obstruct Ventura County from coming into attainment for these pollutants. The project would also not result in substantial DPM emissions during construction, with construction activity lasting approximately 120 days. Additionally, the project would be required to comply with VCAPCD Rule 55, which limits the amount of fugitive dust generated during construction. Due to the minimal contribution of particulate matter during construction, the project is not anticipated to result in health effects associated with PM_{10} or $PM_{2.5}$.



In summary, construction and operation of the project would not result in exceedances of the VCAPCD thresholds for criteria pollutants, and potential health effects associated with criteria air pollutants would be **less than significant**.

Mitigation Measures

No mitigation is required.

Level of Significance after Mitigation

Impacts would be less than significant; therefore, no mitigation is required.

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

The occurrence and severity of potential odor impacts depends on numerous factors. The nature, frequency, and intensity of the source; the wind speeds and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying and cause distress among the public and generate citizen complaints.

Odors would be potentially generated from vehicles and equipment exhaust emissions during construction of the project. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment and asphalt pavement application. Such odors would disperse rapidly from the project site and generally occur at magnitudes that would not affect substantial numbers of people. Furthermore, the project entails demolition of existing buildings and the paving of surfaces, which would not result in the creation of long-term sources commonly associated with odors. Therefore, impacts associated with odors during construction would be **less than significant**.

Mitigation Measures

No mitigation is required.

Level of Significance after Mitigation

Impacts would be less than significant; therefore, no mitigation is required.

4 Greenhouse Gas Emissions Assessment

4.1 Greenhouse Gas Emissions Setting

GHGs are gases that absorb infrared radiation in the atmosphere. The greenhouse effect is a natural process that contributes to regulating the Earth's temperature. Global climate change concerns are focused on whether human activities are leading to an enhancement of the greenhouse effect. Principal GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O_1), O_3 , and water vapor. If the atmospheric concentrations of GHGs rise, the average temperature of the lower atmosphere will gradually increase. Globally, climate change has the potential to impact numerous environmental resources. Although climate change is driven by global atmospheric conditions, climate change impacts are felt locally. Climate change is already affecting California: average temperatures have increased, leading to more



extreme hot days and fewer cold nights; shifts in the water cycle have been observed, with less winter precipitation falling as snow, and both snowmelt and rainwater running off earlier in the year; sea levels have risen; and wildland fires are becoming more frequent and intense due to dry seasons that start earlier and end later (CAT 2010).

The effect each GHG has on climate change is measured as a combination of the mass of its emissions and the potential of a gas or aerosol to trap heat in the atmosphere, known as its global warming potential (GWP), which varies among GHGs. Total GHG emissions are expressed as a function of how much warming would be caused by the same mass of CO_2 . Thus, GHG emissions are typically measured in terms of metric tons (MT) of CO_2 equivalent (CO_2 e). The CO_2 e for a gas is derived by multiplying the mass of the gas by the associated GWP, such that MT of CO_2 e = (MT of a GHG) × (GWP of the GHG). CalEEMod assumes that the GWP for CO_3 which means that emissions of 1 MT of CO_3 are equivalent to emissions of 25 MT of CO_3 , and the GWP for O_3 0 is 298, based on the Intergovernmental Panel on Climate Change's Fourth Assessment Report (IPCC 2007).

4.2 Regulatory Setting

Federal

Massachusetts v. EPA

In Massachusetts v. EPA (April 2007), the U.S. Supreme Court directed the EPA administrator to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In December 2009, the administrator signed a final rule with the following two distinct findings regarding GHGs under Section 202(a) of the federal Clean Air Act:

- The administrator found that elevated concentrations of GHGs—CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆—in the atmosphere threaten the public health and welfare of current and future generations. This is the "endangerment finding."
- The administrator further found the combined emissions of GHGs—CO₂, CH₄, N₂O, and HFCs—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is the "cause or contribute finding."

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the Clean Air Act.

Federal Vehicle Standards

In response to the U.S. Supreme Court ruling previously discussed, the Bush Administration issued Executive Order (EO) 13432 in 2007 directing the EPA, the Department of Transportation, and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the National Highway Traffic Safety Administration (NHTSA) issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011, and in 2010, the EPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016 (75 FR 25324–25728).



In 2010, President Barack Obama issued a memorandum directing the Department of Transportation, Department of Energy, EPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, EPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017–2025 light-duty vehicles (EPA 2017).

In August 2016, the EPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower CO₂ emissions by approximately 1.1 billion MT and reduce oil consumption by up to 2 billion barrels over the lifetime of the vehicles sold under the program (EPA and NHTSA 2016).

In August 2018, EPA and NHTSA proposed to amend certain fuel economy and GHG standards for passenger cars and light trucks and establish new standards for model years 2021 through 2026. Compared to maintaining the post-2020 standards now in place, the 2018 proposal would increase U.S. fuel consumption by about half a million barrels per day (2%–3% of total daily consumption, according to the Energy Information Administration) and would impact the global climate by 3/1000th of 1°C by 2100 (EPA and NHTSA 2018). California and other states have stated their intent to challenge federal actions that would delay or eliminate GHG reduction measures and have committed to cooperating with other countries to implement global climate change initiatives.

On September 27, 2019, the EPA and NHTSA published the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program (84 FR 51310), which became effective November 26, 2019. The Part One Rule revokes California's authority to set its own GHG emissions standards and set zero-emission vehicle mandates in California. On March 31, 2020, the EPA and NHTSA issued the Part Two Rule, which will go into effect 60 days after being published in the Federal Register. The Part Two Rule sets CO₂ emissions standards and corporate average fuel economy standards for passenger vehicles and light-duty trucks for model years 2021 through 2026. On January 20, 2021, President Joe Biden issued an EO on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis, which includes review of Part One Rule by April 2021 and review of the Part Two Rule by Jul 2021 (The White House 2021).

State

E0 S-3-05

EO S-3-05 (June 2005) established the following statewide goals: GHG emissions should be reduced to 2000 levels by 2010, GHG emissions should be reduced to 1990 levels by 2020, and GHG emissions should be reduced to 80% below 1990 levels by 2050.

Assembly Bill (AB) 32

In furtherance of the goals established in EO S-3-05, the legislature enacted AB 32. The bill is referred to as the California Global Warming Solutions Act of 2006 (September 27, 2006). AB 32 provided initial direction on creating a comprehensive multi-year program to limit California's GHG emissions at 1990 levels by 2020 and initiate the transformations required to achieve the state's long-range climate objectives.

CARB's Climate Change Scoping Plan



One specific requirement of AB 32 is for CARB to prepare a scoping plan for achieving the maximum technologically feasible and cost-effective GHG emission reductions by 2020 (California Health and Safety Code, Section 38561[a]), and to update the plan at least once every 5 years. In 2008, CARB approved the first scoping plan. The Climate Change Scoping Plan: A Framework for Change (Scoping Plan) included a mix of recommended strategies that combined direct regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs calculated to meet the 2020 statewide GHG emission limit and initiate the transformations needed to achieve the state's long-range climate objectives. Expanding and strengthening existing energy efficiency programs as well as building and appliance standards.

In 2014, CARB approved the first update to the Scoping Plan. The First Update to the Climate Change Scoping Plan: Building on the Framework (First Update) defined the state's GHG emission reduction priorities for the next 5 years and laid the groundwork to start the transition to the post-2020 goals set forth in EO S-3-05 and EO B-16-2012. The First Update concluded that California is on track to meet the 2020 target but recommended a 2030 mid-term GHG reduction target be established to ensure a continuum of action to reduce emissions (CARB 2014). The First Update recommended a mix of technologies in key economic sectors to reduce emissions through 2050 including energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and the rapid market penetration of efficient and clean energy technologies. As part of the First Update, CARB recalculated the state's 1990 emissions level, using more recent GWPs identified by the IPCC, from 427 MMT CO₂e to 431 MMT CO₂e (CARB 2014).

In December 2017, CARB adopted the 2017 Climate Change Scoping Plan Update (2030 Scoping Plan) (CARB 2017). The 2030 Scoping Plan builds on the successful framework established in the initial Scoping Plan and First Update, while identifying new, technologically feasible and cost-effective strategies that will serve as the framework to achieve the 2030 GHG target and define the state's climate change priorities to 2030 and beyond. The strategies' known commitments include implementing renewable energy and energy efficiency (including the mandates of Senate Bill [SB] 350), increased stringency of the LCFS, measures identified in the Mobile Source and Freight Strategies, measures identified in the proposed Short-Lived Climate Pollutant Plan, and increased stringency of SB 375 targets. To fill the gap in additional reductions needed to achieve the 2030 target, it recommends continuing the cap-and-trade program and a measure to reduce GHGs from refineries by 20%.

EO B-30-15

E0 B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under E0 S-3-05 and AB 32. E0 B-30-15 set an interim target goal of reducing GHG emissions to 40% below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80% below 1990 levels by 2050 as set forth in E0 S-3-05. To facilitate achieving this goal, E0 B-30-15 called for CARB to update the Scoping Plan to express the 2030 target in terms of MMT C0₂e. The E0 also called for state agencies to continue to develop and implement GHG emission reduction programs in support of the reduction targets.

SB 32 and AB 197

SB 32 and AB 197 (enacted in 2016) are companion bills. SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40% below 1990 levels by 2030. AB



197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, in order to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two members of the Legislature to the CARB Board as nonvoting members; requires CARB to make available and update (at least annually via its website) emissions data for GHGs, criteria air pollutants, and TACs from reporting facilities; and requires CARB to identify specific information for GHG emissions reduction

EO B-55-18

measures when updating the Scoping Plan.

EO B-55-18 (September 2018) establishes a new statewide goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." This EO directs CARB to "work with relevant state agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal."

State Vehicle Standards (AB 1493 and EO B-16-12)

AB 1493 (July 2002) was enacted in a response to the transportation sector accounting for more than half of California's CO₂ emissions. AB 1493 required CARB to set GHG emission standards for passenger vehicles, lightduty trucks, and other vehicles determined by the state board to be vehicles that are primarily used for noncommercial personal transportation in the state. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. EO B-16-12 (March 2012) required that state entities under the governor's direction and control support and facilitate the rapid commercialization of zero-emissions vehicles. It ordered CARB, CEC, California Public Utilities Commission, and other relevant agencies to work with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve benchmark goals by 2015, 2020, and 2025. On a statewide basis, EO B-16-12 established a target reduction of GHG emissions from the transportation sector equaling 80% less than 1990 levels by 2050. This directive did not apply to vehicles that have special performance requirements necessary for the protection of the public safety and welfare. As explained under the "Federal Vehicle Standards" description above, EPA and NHTSA approved the SAFE Vehicles Rule Part One and Two, which revoked California's authority to set its own GHG emissions standards and set zero-emission vehicle mandates in California. As the EPA rule is the subject of pending legal challenges, and President Biden issued an EO to review Part One and Part Two, this analysis continues to utilize the best available information at this time, as set forth in EMFAC.

Advanced Clean Cars Program and Zero-Emissions Vehicle Program

The Advanced Clean Cars Program (January 2012) is a new emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars (CARB 2012). To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. It is estimated that in 2025, cars will emit 75% less smog-forming pollution than the average new car sold today. To reduce GHG emissions, CARB, in conjunction with the EPA and the NHTSA, adopted new GHG standards for model year 2017 to 2025 vehicles; the new standards are estimated to reduce GHG emissions by 34% in 2025. The Zero-Emissions Vehicle Program will act as the focused technology of the Advanced Clean Cars Program by



requiring manufacturers to produce increasing numbers of zero-emissions vehicles and plug-in hybrid electric vehicles in the 2018 to 2025 model years.

The ACC II program is currently in development to establish the next set of LEV and ZEV requirements for model years after 2025 to contribute to meeting federal ambient air quality ozone standards and California's carbon neutrality standards (CARB 2021). The main objectives of ACC II are:

- 1. Maximize criteria and GHG emission reductions through increased stringency and real-world reductions.
- 2. Accelerate the transition to ZEVs through both increased stringency of requirements and associated actions to support wide-scale adoption and use.

An ACC II rulemaking package, which will consider technological feasibility, environmental impacts, equity, economic impacts, and consumer impacts, is anticipated to be presented to CARB for consideration in June 2022.

Heavy-Duty Diesel

The Heavy-Duty Truck and Bus Regulation, went into effect January 2012, requires diesel particulate matter filters be applied to newer heavier trucks and buses by January 1, 2012, with older vehicles required to comply by January 1, 2015. CARB adopted the proposed amendments to the Heavy-Duty Truck and Bus Regulation on December 31, 2014 to reduce diesel particulate matter, a major source of black carbon, and oxides of nitrogen emissions from heavy-duty diesel vehicles (Cal. Code Regs., tit 13, § 2025). The rule requires nearly all diesel trucks and buses to be compliant with the 2010 model year engine requirement by January 1, 2023. CARB also adopted an Airborne Toxic Control Measure to limit idling of diesel-fueled commercial vehicles on December 12, 2013. This rule requires diesel-fueled vehicles with gross vehicle weights greater than 10,000 pounds to idle no more than 5 minutes at any location (Cal. Code Regs., tit. 13, § 2485).



Thresholds of Significance 4.3

4.3.1 **CEQA** Guidelines

The California Natural Resources Agency adopted amendments to the CEQA Guidelines on December 30, 2009, which became effective on March 18, 2010. With respect to GHG emissions, the amended CEQA Guidelines state in Section 15064.4(a) that lead agencies should "make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions. Section 15064.7(c) of the CEQA Guidelines specifies that "[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence." Similarly, the revisions to Appendix G, Environmental Checklist Form, which is often used as a basis for lead agencies' selection of significance thresholds, do not prescribe specific thresholds.

Rather, the CEQA Guidelines establish two CEQA thresholds related to GHGs, which will be used in this memorandum to discuss the significance of project impacts (14 CCR 15000 et seq., Appendix G):

- 1. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- 2. Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

The CEQA Guidelines do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA (CNRA 2009). The State of California has not adopted emission-based thresholds for GHG emissions under CEQA. The Governor's Office of Planning and Research's Technical Advisory, titled "Discussion Draft CEQA and Climate Change Advisory," states that:

"Neither the CEQA statute nor the CEQA Guidelines prescribe thresholds of significance or particular methodologies for perming an impact analysis. This is left to lead agency judgment and discretion, based upon factual data and guidance from regulatory agencies and other sources where available and applicable. Even in the absence of clearly defined thresholds for GHG emissions, such emissions must be disclosed and mitigated to the extent feasible whenever the lead agency determines that the project contributes to a significant, cumulative climate change impact." (OPR 2018)

Furthermore, the advisory document indicates that "in the absence of regulatory standards for GHG emissions or other scientific data to clearly define what constitutes a 'significant impact,' individual lead agencies may undertake a project-by-project analysis, consistent with available guidance and current CEQA practice." Section 15064.7(c) of the CEQA Guidelines specifies that "when adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence."



Amendments to Section 15064.4 of the CEQA Guidelines were adopted to assist lead agencies in determining the significance of the impacts of GHG emissions. Section 15064.4 specifies that a lead agency "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project." Section 15064.4 also provides lead agencies with the discretion to determine whether to assess those emissions quantitatively or to rely on a qualitative analysis or performance-based standards. In addition, the CEQA Guidelines specify that "[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence" (14 CCR 15064.7[c]).

As described previously the project is located within the SCCAB and under the jurisdiction of the VCAPCD which, to date, has not adopted significance thresholds for project level analyses. Therefore, because there is no regional or jurisdiction specific threshold, significance of the project's GHG-related impacts where determined by considering whether the project's GHG emissions meet the 900 MT CO₂e per year screening level threshold identified by the CAPCOA (CAPCOA 2008). The 900 MT CO₂e per year threshold was developed based on various land use densities and future discretionary project types to determine the size of projects that would likely have a less than cumulatively considerable contribution to climate change. The CAPCOA threshold was developed to ensure capture of 90% or more of likely future discretionary developments with the objective to set the emissions threshold low enough to capture a substantial fraction of future development while setting the emission threshold high enough to exclude small development projects that would contribute a relatively small fraction of cumulative statewide GHG emissions.

Projects that meet or fall below CAPCOA's screening level threshold of 900 MT CO₂e per year of GHG emissions require no further analysis and are not required to implement mitigation measures to reduce GHG emissions. As such, the CAPCOA threshold of 900 MT CO₂e per year is used as a quantitative threshold for the analysis of impacts related to GHG emissions generated by the project.

4.3.2 Local Guidance

4.4 GHG Emissions Impact Analysis

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

Construction Emissions

CalEEMod Version 2020.4.0 was used to calculate the annual GHG emissions based on the construction scenario described in Section 2.1. Construction of the project is anticipated to commence in March 2023, and would be completed by May 2023. On-site sources of GHG emissions include off-road equipment, and off-site sources include vendor and haul trucks and worker vehicles. Table 5 presents construction GHG emissions for the project in 2023 from on-site and off-site emission sources.



Table 5. Estimated Annual Construction GHG Emissions

	CO ₂	CH ₄	N ₂ O	CO ₂ e
Year	Metric Tons			
2023	54.16	0.02	<0.01	54.77

Notes: CO_2 = carbon dioxide; CH_4 = methane; N_2O = nitrous oxide; CO_2e = carbon dioxide equivalent; <0.01 = value less than reported 0.01. See Attachment A for complete results.

As shown in Table 5, the estimated total GHG emissions during construction would be approximately 55 MT CO₂e over the construction period. As with project-generated construction air quality pollutant emissions, GHG emissions generated during construction of the project would be short-term in nature, lasting only for the duration of the construction period, and would not represent a long-term source of GHG emissions. Therefore, GHGs generated by the project would not exceed the screening threshold of 900 MT CO₂e per year and the project's GHG emissions would be **less than significant**.

Mitigation Measures

No mitigation is required.

Level of Significance after Mitigation

Impacts would be less than significant; therefore, no mitigation is required.

Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Applicable plans adopted for the purpose of reducing GHG emissions including the SCAG's 2020 RTP/SCS, CARB's Scoping Plan, SB 32, and EO S-3-05. A consistency analysis with these regulations and plans are presented below:

Project Consistency with 2020-2045 RTP/SCS (Connect SoCal)

On September 3, 2020, SCAG's Regional Council formally adopted the 2020 RTP/SCS (Connect SoCal). The SCAG 2020 RTP/SCS is forecast to help California reach its GHG reduction goals by reducing GHG emissions from passenger cars by 8 percent below 2005 levels by 2020 and 19 percent by 2035 in accordance with the most recent CARB targets adopted in March 2018. The 2020 RTP/SCS includes ten goals focused on promoting economic prosperity, improving mobility, protecting the environment, and supporting healthy/complete communities. Furthermore, the 2020 RTP/SCS establishes a land use vision of center-focused placemaking, concentrating growth in and near Priority Growth Areas, transferring of development rights, urban greening, creating greenbelts and community separators, and implementing regional advance mitigation (SCAG 2020). As previously discussed, the project involves only demolition and paving activities, thus many of the goals within the 2020 RTP/SCS are not applicable to the project. Furthermore, the project would not result in significant emissions or a substantial amount of vehicle trip generation or traffic distribution along area roadways. Therefore, the project would not conflict with any of the goals within SCAG's 2020 RTP/SCS.



Project Consistency with CARB's Scoping Plan

The Scoping Plan (approved by CARB in 2008 and updated in 2014 and 2017) provides a framework for actions to reduce California's GHG emissions and requires CARB and other state agencies to adopt regulations and other initiatives to reduce GHGs. The Scoping Plan is not directly applicable to specific projects, nor is it intended to be used for project-level evaluations.² Under the Scoping Plan, however, there are several state regulatory measures aimed at the identification and reduction of GHG emissions. CARB and other state agencies have adopted many of the measures identified in the Scoping Plan. Most of these measures focus on area source emissions (e.g., energy usage, high-GWP GHGs in consumer products) and changes to the vehicle fleet (i.e., hybrid, electric, and more fuel-efficient vehicles) and associated fuels (e.g., Low Carbon Fuel Standard), among others. To the extent that these regulations are applicable to the project, the project would comply will all regulations adopted in furtherance of the Scoping Plan to the extent required by law.

Project Consistency with Senate Bill 32 and Executive Order S-3-05

The project would not impede the attainment of the most recent state GHG reduction goals identified in SB 32 and EO S-3-05 and. SB 32 establishes a statewide goal of reducing GHG emissions to 40% below 1990 levels by 2030, while EO S-3-05 establishes a statewide goal of reducing GHG emissions to 80% below 1990 levels by 2050. While there are no established protocols or thresholds of significance for that future year analysis, CARB forecasts that compliance with the current Scoping Plan puts the state on a trajectory of meeting these long-term GHG goals, although the specific path to compliance is unknown (CARB 2014).

CARB has expressed optimism with regard to both the 2030 and 2050 goals. It states in the First Update to the Climate Change Scoping Plan that "California is on track to meet the near-term 2020 GHG emissions limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32" (CARB 2014, p. ES2). With regard to the 2050 target for reducing GHG emissions to 80% below 1990 levels, the First Update to the Climate Change Scoping Plan states the following (CARB 2014, p. 34):

This level of reduction is achievable in California. In fact, if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80% below 1990 levels by 2050. Additional measures, including locally driven measures and those necessary to meet federal air quality standards in 2032, could lead to even greater emission reductions.

In other words, CARB believes that the state is on a trajectory to meet the 2030 and 2050 GHG reduction targets set forth in AB 32, EO B-30-15, and EO S-3-05. This is confirmed in the 2017 Scoping Plan, which states the following (CARB 2017):

The Scoping Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while also identifying new, technologically feasible, and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards

The Final Statement of Reasons for the amendments to the CEQA Guidelines reiterates the statement in the Initial Statement of Reasons that "[t]he Scoping Plan may not be appropriate for use in determining the significance of individual projects because it is conceptual at this stage and relies on the future development of regulations to implement the strategies identified in the Scoping Plan" (CNRA 2009).



innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities.

As discussed previously, the project would not conflict with the SCAG's 2020 RTP/SCS and CARB's 2017 Scoping Plan due to the minimal amount of GHG emissions generated by construction activities and because the project would not result in long-term GHG emissions after demolition of the seven buildings. Therefore, the project would not conflict with the state's future GHG targets under SB 32 and EO S-3-05.

Summary

Based on the considerations previously outlined, the project would not generate substantial GHG emissions or conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs, and no mitigation is required. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required.

Level of Significance after Mitigation

Impacts would be less than significant; therefore, no mitigation is required.

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Attachment ACalEEMod Output Files

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Former Navy Property Restoration Project

Ventura County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.50	Acre	1.50	65,340.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Former Navy Restoration Project. Ventura County.

Land Use - 1.5 acres of asphalt.

Construction Phase - Construction activities would commence March 2023, with completion August 2023 (120 day construction duration).

Off-road Equipment - Updated per applicant.

Off-road Equipment - Updated per applicant.

Off-road Equipment - Updated per applicant.

Trips and VMT - Updated per applicant.

On-road Fugitive Dust - Default inputs assumed.

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Demolition - 11,008.16 SF of buildings demolished.

Grading - Default inputs assumed.

Construction Off-road Equipment Mitigation - Water twice daily.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	4.00	50.00
tblConstructionPhase	NumDays	10.00	50.00
tblGrading	AcresOfGrading	5.63	4.00
tblOffRoadEquipment	UsageHours	8.00	3.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblTripsAndVMT	HaulingTripNumber	50.00	16.00
tblTripsAndVMT	HaulingTripNumber	0.00	2.00
tblTripsAndVMT	HaulingTripNumber	0.00	16.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	WorkerTripNumber	8.00	4.00
tblTripsAndVMT	WorkerTripNumber	10.00	2.00
tblTripsAndVMT	WorkerTripNumber	5.00	4.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							MT	/yr		
2023	0.0321	0.3112	0.3012	6.1000e- 004	0.0107	0.0136	0.0243	1.9100e- 003	0.0125	0.0144	0.0000	54.1619	54.1619	0.0159	7.1000e-004	54.7694
Maximum	0.0321	0.3112	0.3012	6.1000e- 004	0.0107	0.0136	0.0243	1.9100e- 003	0.0125	0.0144	0.0000	54.1619	54.1619	0.0159	7.1000e-004	54.7694

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					tons	s/yr							МТ	-/yr		
2023	0.0321	0.3112	0.3012	6.1000e- 004	6.5100e-003	0.0136	0.0201	1.3300e- 003	0.0125	0.0138	0.0000	54.1618	54.1618	0.0159	7.1000e-004	54.7693
Maximum	0.0321	0.3112	0.3012	6.1000e- 004	6.5100e-003	0.0136	0.0201	1.3300e- 003	0.0125	0.0138	0.0000	54.1618	54.1618	0.0159	7.1000e-004	54.7693

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	39.16	0.00	17.23	30.37	0.00	4.09	0.00	0.00	0.00	0.00	0.00	0.00

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3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/6/2023	3/31/2023	5	20	
2	Grading	Grading	4/1/2023	6/9/2023	5	50	
3	Paving	Paving	6/10/2023	8/18/2023	5	50	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 1.5

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating -

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	1	6.00	158	0.38
Demolition	Rubber Tired Dozers	1	3.00	247	0.40
Demolition	Rubber Tired Loaders	1	2.00	203	0.36
Grading	Excavators	1	2.00	158	0.38
Grading	Graders	1	6.00	187	0.41
Grading	Plate Compactors	1	4.00	8	0.43
Grading	Rollers	1	6.00	80	0.38
Paving	Other Construction Equipment	1	8.00	172	0.42
Paving	Paving Equipment	1	8.00	132	0.36

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Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	3	4.00	4.00	16.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	2.00	2.00	2.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	4.00	4.00	16.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

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3.2 **Demolition - 2023**

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							МТ	-/yr		
Fugitive Dust					5.4900e-003	0.0000	5.4900e- 003	8.3000e- 004	0.0000	8.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.6600e- 003	0.0450	0.0399	9.0000e- 005		1.9900e- 003	1.9900e- 003		1.8300e- 003	1.8300e-003	0.0000	7.5895	7.5895	2.4500e- 003	0.0000	7.6508
Total	4.6600e- 003	0.0450	0.0399	9.0000e- 005	5.4900e-003	1.9900e- 003	7.4800e- 003	8.3000e- 004	1.8300e- 003	2.6600e-003	0.0000	7.5895	7.5895	2.4500e- 003	0.0000	7.6508

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	-/yr		
Hauling	2.0000e- 005	1.0000e- 003	2.7000e-004	0.0000	1.4000e-004	1.0000e- 005	1.4000e- 004	4.0000e- 005	1.0000e- 005	4.0000e-005	0.0000	0.4544	0.4544	3.0000e- 005	7.0000e-005	0.4768
Vendor	4.0000e- 005	1.5700e- 003	5.5000e-004	1.0000e- 005	2.7000e-004	1.0000e- 005	2.8000e- 004	8.0000e- 005	1.0000e- 005	9.0000e-005	0.0000	0.7297	0.7297	3.0000e- 005	1.1000e-004	0.7630
Worker	1.1000e- 004	8.0000e- 005	9.9000e-004	0.0000	3.2000e-004	0.0000	3.2000e- 004	9.0000e- 005	0.0000	9.0000e-005	0.0000	0.2477	0.2477	1.0000e- 005	1.0000e-005	0.2501

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Total	1.7000e-	2.6500e-	1.8100e-003	1.0000e-	7.3000e-004	2.0000e-	7.4000e-	2.1000e-		2.2000e-004	0.0000	1.4318	1.4318	7.0000e-	1.9000e-004	1.4898
	004	003		005		005	004	004	005					005		

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							МТ	Γ/yr		
Fugitive Dust					2.4700e-003	0.0000	2.4700e- 003	3.7000e- 004	0.0000	3.7000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.6600e- 003	0.0450	0.0399	9.0000e- 005		1.9900e- 003	1.9900e- 003		1.8300e- 003	1.8300e-003	0.0000	7.5895	7.5895	2.4500e- 003	0.0000	7.6508
Total	4.6600e- 003	0.0450	0.0399	9.0000e- 005	2.4700e-003	1.9900e- 003	4.4600e- 003	3.7000e- 004	1.8300e- 003	2.2000e-003	0.0000	7.5895	7.5895	2.4500e- 003	0.0000	7.6508

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	Г/уг		
Hauling	2.0000e- 005	1.0000e- 003	2.7000e-004	0.0000	1.4000e-004	1.0000e- 005	1.4000e- 004	4.0000e- 005	1.0000e- 005	4.0000e-005	0.0000	0.4544	0.4544	3.0000e- 005	7.0000e-005	0.4768
Vendor	4.0000e- 005	1.5700e- 003	5.5000e-004	1.0000e- 005	2.7000e-004	1.0000e- 005	2.8000e- 004	8.0000e- 005	1.0000e- 005	9.0000e-005	0.0000	0.7297	0.7297	3.0000e- 005	1.1000e-004	0.7630
Worker	1.1000e- 004	8.0000e- 005	9.9000e-004	0.0000	3.2000e-004	0.0000	3.2000e- 004	9.0000e- 005	0.0000	9.0000e-005	0.0000	0.2477	0.2477	1.0000e- 005	1.0000e-005	0.2501

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ı	Total	1.7000e-	2.6500e-	1.8100e-003	1.0000e-	7.3000e-004	2.0000e-	7.4000e-	2.1000e-	2.0000e-	2.2000e-004	0.0000	1.4318	1.4318	7.0000e-	1.9000e-004	1.4898
		004	003		005		005	004	004	005					005		
ı																	

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							МТ	/yr		
Fugitive Dust					2.1200e-003	0.0000	2.1200e- 003	2.3000e- 004	0.0000	2.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0118	0.1303	0.0895	2.1000e- 004		5.0800e- 003	5.0800e- 003		4.6900e- 003	4.6900e-003	0.0000	18.4496	18.4496	5.8800e- 003	0.0000	18.5966
Total	0.0118	0.1303	0.0895	2.1000e- 004	2.1200e-003	5.0800e- 003	7.2000e- 003	2.3000e- 004	4.6900e- 003	4.9200e-003	0.0000	18.4496	18.4496	5.8800e- 003	0.0000	18.5966

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr				MT	/yr					
Hauling	0.0000	1.3000e- 004	3.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e- 005	0.0000	0.0000	1.0000e-005	0.0000	0.0568	0.0568	0.0000	1.0000e-005	0.0596

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Vendor	5.0000e-	1.9700e-	6.8000e-004	1.0000e-	3.3000e-004	1.0000e-	3.4000e-	1.0000e-	1.0000e-	1.1000e-004	0.0000	0.9121	0.9121	4.0000e-	1.4000e-004	0.9537
	005	003		005		005	004	004	005					005		
Worker	1.4000e- 004	1.0000e- 004	1.2400e-003	0.0000	4.0000e-004	0.0000	4.1000e- 004	1.1000e- 004	0.0000	1.1000e-004	0.0000	0.3096	0.3096	1.0000e- 005	1.0000e-005	0.3126
Total	1.9000e-	2.2000e-	1.9500e-003	1.0000e-	7.5000e-004	1.0000e-	7.7000e-	2.1000e-	1.0000e-	2.3000e-004	0.0000	1.2785	1.2785	5.0000e-	1.6000e-004	1.3259
	004	003		005		005	004	004	005					005		

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							MT	Г/уг		
Fugitive Dust					9.5000e-004	0.0000	9.5000e- 004	1.0000e- 004	0.0000	1.0000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0118	0.1303	0.0895	2.1000e- 004		5.0800e- 003	5.0800e- 003		4.6900e- 003	4.6900e-003	0.0000	18.4496	18.4496	5.8800e- 003	0.0000	18.5966
Total	0.0118	0.1303	0.0895	2.1000e- 004	9.5000e-004	5.0800e- 003	6.0300e- 003	1.0000e- 004	4.6900e- 003	4.7900e-003	0.0000	18.4496	18.4496	5.8800e- 003	0.0000	18.5966

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr				МТ	/yr					
Hauling	0.0000	1.3000e- 004	3.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e- 005	0.0000	0.0000	1.0000e-005	0.0000	0.0568	0.0568	0.0000	1.0000e-005	0.0596

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Vendor	5.0000e-	1.9700e-	6.8000e-004	1.0000e-	3.3000e-004	1.0000e-	3.4000e-	1.0000e-	1.0000e-	1.1000e-004	0.0000	0.9121	0.9121	4.0000e-	1.4000e-004	0.9537
	005	003		005		005	004	004	005					005		
Worker	1.4000e- 004	1.0000e- 004	1.2400e-003	0.0000	4.0000e-004	0.0000	4.1000e- 004	1.1000e- 004	0.0000	1.1000e-004	0.0000	0.3096	0.3096	1.0000e- 005	1.0000e-005	0.3126
Total	1.9000e-	2.2000e-	1.9500e-003	1.0000e-	7.5000e-004	1.0000e-	7.7000e-	2.1000e-	1.0000e-	2.3000e-004	0.0000	1.2785	1.2785	5.0000e-	1.6000e-004	1.3259
	004	003		005		005	004	004	005					005		

3.4 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Ü	xhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons/yr								МТ	-/yr		
Off-Road	0.0130	0.1260	0.1640	2.6000e- 004		.4200e- 003	6.4200e- 003		5.9100e- 003	5.9100e-003	0.0000	22.5147	22.5147	7.2800e- 003	0.0000	22.6968
Paving	1.9700e- 003				0	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0150	0.1260	0.1640	2.6000e- 004	-	.4200e- 003	6.4200e- 003		5.9100e- 003	5.9100e-003	0.0000	22.5147	22.5147	7.2800e- 003	0.0000	22.6968

Unmitigated Construction Off-Site

ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

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Category		tons/yr									MT/yr							
Hauling	2.0000e- 005	1.0000e- 003	2.7000e-004	0.0000	1.4000e-004	1.0000e- 005	1.4000e- 004	4.0000e- 005	1.0000e- 005	4.0000e-005	0.0000	0.4544	0.4544	3.0000e- 005	7.0000e-005	0.4768		
Vendor	1.0000e- 004	3.9400e- 003	1.3600e-003	2.0000e- 005	6.7000e-004	2.0000e- 005	6.9000e- 004	1.9000e- 004	2.0000e- 005	2.1000e-004	0.0000	1.8241	1.8241	7.0000e- 005	2.7000e-004	1.9074		
Worker	2.9000e- 004	2.0000e- 004	2.4800e-003	1.0000e- 005	8.1000e-004	0.0000	8.1000e- 004	2.1000e- 004	0.0000	2.2000e-004	0.0000	0.6193	0.6193	2.0000e- 005	2.0000e-005	0.6253		
Total	4.1000e- 004	5.1400e- 003	4.1100e-003	3.0000e- 005	1.6200e-003	3.0000e- 005	1.6400e- 003	4.4000e- 004	3.0000e- 005	4.7000e-004	0.0000	2.8978	2.8978	1.2000e- 004	3.6000e-004	3.0094		

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					tons	s/yr							МТ	Г/уг		
Off-Road	0.0130	0.1260	0.1640	2.6000e- 004		6.4200e- 003	6.4200e- 003		5.9100e- 003	5.9100e-003	0.0000	22.5147	22.5147	7.2800e- 003	0.0000	22.6967
Paving	1.9700e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0150	0.1260	0.1640	2.6000e- 004		6.4200e- 003	6.4200e- 003		5.9100e- 003	5.9100e-003	0.0000	22.5147	22.5147	7.2800e- 003	0.0000	22.6967

Mitigated Construction Off-Site

ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e

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Category		tons/yr										MT/yr							
Hauling	2.0000e- 005	1.0000e- 003	2.7000e-004	0.0000	1.4000e-004	1.0000e- 005	1.4000e- 004	4.0000e- 005	1.0000e- 005	4.0000e-005	0.0000	0.4544	0.4544	3.0000e- 005	7.0000e-005	0.4768			
Vendor	1.0000e- 004	3.9400e- 003	1.3600e-003	2.0000e- 005	6.7000e-004	2.0000e- 005	6.9000e- 004	1.9000e- 004	2.0000e- 005	2.1000e-004	0.0000	1.8241	1.8241	7.0000e- 005	2.7000e-004	1.9074			
Worker	2.9000e- 004	2.0000e- 004	2.4800e-003	1.0000e- 005	8.1000e-004	0.0000	8.1000e- 004	2.1000e- 004	0.0000	2.2000e-004	0.0000	0.6193	0.6193	2.0000e- 005	2.0000e-005	0.6253			
Total	4.1000e- 004	5.1400e- 003	4.1100e-003	3.0000e- 005	1.6200e-003	3.0000e- 005	1.6400e- 003	4.4000e- 004	3.0000e- 005	4.7000e-004	0.0000	2.8978	2.8978	1.2000e- 004	3.6000e-004	3.0094			

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Former Navy Property Restoration Project

Ventura County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.50	Acre	1.50	65,340.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Former Navy Restoration Project. Ventura County.

Land Use - 1.5 acres of asphalt.

Construction Phase - Construction activities would commence March 2023, with completion August 2023 (120 day construction duration).

Off-road Equipment - Updated per applicant.

Off-road Equipment - Updated per applicant.

Off-road Equipment - Updated per applicant.

Trips and VMT - Updated per applicant.

On-road Fugitive Dust - Default inputs assumed.

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Demolition - 11,008.16 SF of buildings demolished.

Grading - Default inputs assumed.

Construction Off-road Equipment Mitigation - Water twice daily.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	4.00	50.00
tblConstructionPhase	NumDays	10.00	50.00
tblGrading	AcresOfGrading	5.63	4.00
tblOffRoadEquipment	UsageHours	8.00	3.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblTripsAndVMT	HaulingTripNumber	50.00	16.00
tblTripsAndVMT	HaulingTripNumber	0.00	2.00
tblTripsAndVMT	HaulingTripNumber	0.00	16.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	WorkerTripNumber	8.00	4.00
tblTripsAndVMT	WorkerTripNumber	10.00	2.00
tblTripsAndVMT	WorkerTripNumber	5.00	4.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/d	day		
2023	0.6139	5.2943	6.7265	0.0115	0.6225	0.2583	0.8237	0.1034	0.2377	0.2886	0.0000	1,121.4782	1,121.4782	0.3266	0.0208	1,134.4009
Maximum	0.6139	5.2943	6.7265	0.0115	0.6225	0.2583	0.8237	0.1034	0.2377	0.2886	0.0000	1,121.4782	1,121.4782	0.3266	0.0208	1,134.4009

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/c	lay							lb/d	day		
2023	0.6139	5.2943	6.7265	0.0115	0.3208	0.2583	0.5220	0.0577	0.2377	0.2557	0.0000	1,121.4782	1,121.4782	0.3266	0.0208	1,134.4009
Maximum	0.6139	5.2943	6.7265	0.0115	0.3208	0.2583	0.5220	0.0577	0.2377	0.2557	0.0000	1,121.4782	1,121.4782	0.3266	0.0208	1,134.4009

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Percent Reduction	0.00	0.00	0.00	0.00	48.47	0.00	36.63	44.18	0.00	11.39	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/6/2023	3/31/2023	5	20	
2	Grading	Grading	4/1/2023	6/9/2023	5	50	
3	Paving	Paving	6/10/2023	8/18/2023	5	50	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 1.5

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating -

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	1	6.00	158	0.38
Demolition	Rubber Tired Dozers	1	3.00	247	0.40
Demolition	Rubber Tired Loaders	1	2.00	203	0.36
Grading	Excavators	1	2.00	158	0.38
Grading	Graders	1	6.00	187	0.41
Grading	Plate Compactors	1	4.00	8	0.43
Grading	Rollers	1	6.00	80	0.38
Paving	Other Construction Equipment	1	8.00	172	0.42
Paving	Paving Equipment	1	8.00	132	0.36

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Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	3	4.00	4.00	16.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	2.00	2.00	2.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	4.00	4.00	16.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 **Demolition - 2023**

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					0.5486	0.0000	0.5486	0.0831	0.0000	0.0831			0.0000			0.0000
Off-Road	0.4659	4.4978	3.9857	8.6400e- 003		0.1994	0.1994		0.1835	0.1835		836.5948	836.5948	0.2706		843.3591
Total	0.4659	4.4978	3.9857	8.6400e- 003	0.5486	0.1994	0.7480	0.0831	0.1835	0.2665		836.5948	836.5948	0.2706		843.3591

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/e	day		
Hauling	1.6100e- 003	0.0960	0.0273	4.5000e- 004	0.0140	7.1000e- 004	0.0147	3.8300e- 003	6.8000e- 004	4.5000e-003		50.0716	50.0716	3.4100e- 003	7.9800e-003	52.5335
Vendor	3.9700e- 003	0.1516	0.0538	7.4000e- 004	0.0271	9.0000e- 004	0.0280	7.7900e- 003	8.6000e- 004	8.6500e-003		80.3819	80.3819	3.3100e- 003	0.0120	84.0487
Worker	0.0115	7.1100e- 003	0.1024	2.8000e- 004	0.0329	1.8000e- 004	0.0330	8.7200e- 003	1.6000e- 004	8.8800e-003		28.3390	28.3390	8.4000e- 004	7.5000e-004	28.5834

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Total	0.0171	0.2547	0.1836	1.4700e-	0.0739	1.7900e-	0.0757	0.0203	1.7000e-	0.0220	158.7924	158.7924	7.5600e-	0.0208	165.1656
				003		003			003				003		

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/	day		
Fugitive Dust					0.2469	0.0000	0.2469	0.0374	0.0000	0.0374			0.0000			0.0000
Off-Road	0.4659	4.4978	3.9857	8.6400e- 003		0.1994	0.1994		0.1835	0.1835	0.0000	836.5948	836.5948	0.2706		843.3591
Total	0.4659	4.4978	3.9857	8.6400e- 003	0.2469	0.1994	0.4463	0.0374	0.1835	0.2209	0.0000	836.5948	836.5948	0.2706		843.3591

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/	day		
Hauling	1.6100e- 003	0.0960	0.0273	4.5000e- 004	0.0140	7.1000e- 004	0.0147	3.8300e- 003	6.8000e- 004	4.5000e-003		50.0716	50.0716	3.4100e- 003	7.9800e-003	52.5335
Vendor	3.9700e- 003	0.1516	0.0538	7.4000e- 004	0.0271	9.0000e- 004	0.0280	7.7900e- 003	8.6000e- 004	8.6500e-003		80.3819	80.3819	3.3100e- 003	0.0120	84.0487
Worker	0.0115	7.1100e- 003	0.1024	2.8000e- 004	0.0329	1.8000e- 004	0.0330	8.7200e- 003	1.6000e- 004	8.8800e-003		28.3390	28.3390	8.4000e- 004	7.5000e-004	28.5834

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Total	0.0171	0.2547	0.1836	1.4700e-	0.0739	1.7900e-	0.0757	0.0203	1.7000e-	0.0220	158.7924	158.7924	7.5600e-	0.0208	165.1656
. •	0.0	0.20	0000		0.0.00		0.0.0.	0.0200		0.0220				0.0200	
				003		003			003				003		
				003		003			003				003		

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3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					0.0848	0.0000	0.0848	9.1600e- 003	0.0000	9.1600e-003			0.0000			0.0000
Off-Road	0.4701	5.2102	3.5783	8.4700e- 003		0.2033	0.2033		0.1875	0.1875		813.4882	813.4882	0.2593		819.9710
Total	0.4701	5.2102	3.5783	8.4700e- 003	0.0848	0.2033	0.2882	9.1600e- 003	0.1875	0.1966		813.4882	813.4882	0.2593		819.9710

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/	day		
Hauling	8.0000e- 005	4.8000e- 003	1.3700e-003	2.0000e- 005	7.0000e- 004	4.0000e- 005	7.3000e- 004	1.9000e- 004	3.0000e- 005	2.3000e-004		2.5036	2.5036	1.7000e- 004	4.0000e-004	2.6267
Vendor	1.9800e- 003	0.0758	0.0269	3.7000e- 004	0.0135	4.5000e- 004	0.0140	3.9000e- 003	4.3000e- 004	4.3300e-003		40.1909	40.1909	1.6500e- 003	6.0100e-003	42.0243
Worker	5.7500e- 003	3.5500e- 003	0.0512	1.4000e- 004	0.0164	9.0000e- 005	0.0165	4.3600e- 003	8.0000e- 005	4.4400e-003		14.1695	14.1695	4.2000e- 004	3.7000e-004	14.2917

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Total	7.8100e-	0.0841	0.0795	5.3000e-	0.0307	5.8000e-	0.0312	8.4500e-	5.4000e-	9.0000e-003	56.8640	56.8640	2.2400e-	6.7800e-003	58.9427
	003			004		004		003	004				003		

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					0.0382	0.0000	0.0382	4.1200e- 003	0.0000	4.1200e-003			0.0000			0.0000
Off-Road	0.4701	5.2102	3.5783	8.4700e- 003		0.2033	0.2033		0.1875	0.1875	0.0000	813.4882	813.4882	0.2593		819.9710
Total	0.4701	5.2102	3.5783	8.4700e- 003	0.0382	0.2033	0.2415	4.1200e- 003	0.1875	0.1916	0.0000	813.4882	813.4882	0.2593		819.9710

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	day		
Hauling	8.0000e- 005	4.8000e- 003	1.3700e-003	2.0000e- 005	7.0000e- 004	4.0000e- 005	7.3000e- 004	1.9000e- 004	3.0000e- 005	2.3000e-004		2.5036	2.5036	1.7000e- 004	4.0000e-004	2.6267
Vendor	1.9800e- 003	0.0758	0.0269	3.7000e- 004	0.0135	4.5000e- 004	0.0140	3.9000e- 003	4.3000e- 004	4.3300e-003		40.1909	40.1909	1.6500e- 003	6.0100e-003	42.0243
Worker	5.7500e- 003	3.5500e- 003	0.0512	1.4000e- 004	0.0164	9.0000e- 005	0.0165	4.3600e- 003	8.0000e- 005	4.4400e-003		14.1695	14.1695	4.2000e- 004	3.7000e-004	14.2917

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Total	7.8100e-	0.0841	0.0795	5.3000e-	0.0307	5.8000e-	0.0312	8.4500e-	5.4000e-	9.0000e-003	56.8640	56.8640	2.2400e-	6.7800e-003	58.9427
	003			004		004		003	004				003		

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3.4 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	day		
Off-Road	0.5192	5.0407	6.5593	0.0103		0.2569	0.2569		0.2364	0.2364		992.7287	992.7287	0.3211		1,000.7554
Paving	0.0786					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5978	5.0407	6.5593	0.0103		0.2569	0.2569		0.2364	0.2364		992.7287	992.7287	0.3211		1,000.7554

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	day		
Hauling	6.5000e- 004	0.0384	0.0109	1.8000e- 004	5.5900e- 003	2.8000e- 004	5.8700e- 003	1.5300e- 003	2.7000e- 004	1.8000e-003		20.0286	20.0286	1.3600e- 003	3.1900e-003	21.0134
Vendor	3.9700e- 003	0.1516	0.0538	7.4000e- 004	0.0271	9.0000e- 004	0.0280	7.7900e- 003	8.6000e- 004	8.6500e-003		80.3819	80.3819	3.3100e- 003	0.0120	84.0487
Worker	0.0115	7.1100e- 003	0.1024	2.8000e- 004	0.0329	1.8000e- 004	0.0330	8.7200e- 003	1.6000e- 004	8.8800e-003		28.3390	28.3390	8.4000e- 004	7.5000e-004	28.5834

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Total	0.0161	0.1971	0.1672	1.2000e-	0.0655	1.3600e-	0.0669	0.0180	1.2900e-	0.0193	128.7495	128.7495	5.5100e-	0.0160	133.6454
				003		003			003				003		

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	0.5192	5.0407	6.5593	0.0103		0.2569	0.2569		0.2364	0.2364	0.0000	992.7287	992.7287	0.3211		1,000.7554
Paving	0.0786					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5978	5.0407	6.5593	0.0103		0.2569	0.2569		0.2364	0.2364	0.0000	992.7287	992.7287	0.3211		1,000.7554

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	day		
Hauling	6.5000e- 004	0.0384	0.0109	1.8000e- 004	5.5900e- 003	2.8000e- 004	5.8700e- 003	1.5300e- 003	2.7000e- 004	1.8000e-003		20.0286	20.0286	1.3600e- 003	3.1900e-003	21.0134
Vendor	3.9700e- 003	0.1516	0.0538	7.4000e- 004	0.0271	9.0000e- 004	0.0280	7.7900e- 003	8.6000e- 004	8.6500e-003		80.3819	80.3819	3.3100e- 003	0.0120	84.0487
Worker	0.0115	7.1100e- 003	0.1024	2.8000e- 004	0.0329	1.8000e- 004	0.0330	8.7200e- 003	1.6000e- 004	8.8800e-003		28.3390	28.3390	8.4000e- 004	7.5000e-004	28.5834

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Total	0.0161	0.1971	0.1672	1.2000e-	0.0655	1.3600e-	0.0669	0.0180	1.2900e-	0.0193	128,7495	128,7495	5.5100e-	0.0160	133.6454
				003		003			003				003	1	1
				000		000			000				000	1	
														1	
														1	

Date: 8/16/2022 8:23 AM

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Former Navy Property Restoration Project Ventura County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	1.50	Acre	1.50	65,340.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	31
Climate Zone	8			Operational Year	2023
Utility Company	Southern California Ediso	on			
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Former Navy Restoration Project. Ventura County.

Land Use - 1.5 acres of asphalt.

Construction Phase - Construction activities would commence March 2023, with completion August 2023 (120 day construction duration).

Off-road Equipment - Updated per applicant.

Off-road Equipment - Updated per applicant.

Off-road Equipment - Updated per applicant.

Trips and VMT - Updated per applicant.

On-road Fugitive Dust - Default inputs assumed.

Date: 8/16/2022 8:23 AM

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Demolition - 11,008.16 SF of buildings demolished.

Grading - Default inputs assumed.

Construction Off-road Equipment Mitigation - Water twice daily.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	4.00	50.00
tblConstructionPhase	NumDays	10.00	50.00
tblGrading	AcresOfGrading	5.63	4.00
tblOffRoadEquipment	UsageHours	8.00	3.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblTripsAndVMT	HaulingTripNumber	50.00	16.00
tblTripsAndVMT	HaulingTripNumber	0.00	2.00
tblTripsAndVMT	HaulingTripNumber	0.00	16.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	WorkerTripNumber	8.00	4.00
tblTripsAndVMT	WorkerTripNumber	10.00	2.00
tblTripsAndVMT	WorkerTripNumber	5.00	4.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/c	lay							lb/d	day		
2023	0.6146	5.2984	6.7265	0.0114	0.6225	0.2583	0.8237	0.1034	0.2377	0.2886	0.0000	1,120.3854	1,120.3854	0.3266	0.0209	1,133.3433
Maximum	0.6146	5.2984	6.7265	0.0114	0.6225	0.2583	0.8237	0.1034	0.2377	0.2886	0.0000	1,120.3854	1,120.3854	0.3266	0.0209	1,133.3433

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/d	day		
2023	0.6146	5.2984	6.7265	0.0114	0.3208	0.2583	0.5220	0.0577	0.2377	0.2557	0.0000	1,120.3854	1,120.3854	0.3266	0.0209	1,133.3433
Maximum	0.6146	5.2984	6.7265	0.0114	0.3208	0.2583	0.5220	0.0577	0.2377	0.2557	0.0000	1,120.3854	1,120.3854	0.3266	0.0209	1,133.3433

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	48.47	0.00	36.63	44.18	0.00	11.39	0.00	0.00	0.00	0.00	0.00	0.00

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	3/6/2023	3/31/2023	5	20	
2	Grading	Grading	4/1/2023	6/9/2023	5	50	
3	Paving	Paving	6/10/2023	8/18/2023	5	50	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 1.5

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating -

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Excavators	1	6.00	158	0.38
Demolition	Rubber Tired Dozers	1	3.00	247	0.40
Demolition	Rubber Tired Loaders	1	2.00	203	0.36
Grading	Excavators	1	2.00	158	0.38
Grading	Graders	1	6.00	187	0.41
Grading	Plate Compactors	1	4.00	8	0.43
Grading	Rollers	1	6.00	80	0.38
Paving	Other Construction Equipment	1	8.00	172	0.42
Paving	Paving Equipment	1	8.00	132	0.36

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	3	4.00	4.00	16.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	2.00	2.00	2.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	2	4.00	4.00	16.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 **Demolition - 2023**

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					0.5486	0.0000	0.5486	0.0831	0.0000	0.0831			0.0000			0.0000
Off-Road	0.4659	4.4978	3.9857	8.6400e- 003		0.1994	0.1994		0.1835	0.1835		836.5948	836.5948	0.2706		843.3591
Total	0.4659	4.4978	3.9857	8.6400e- 003	0.5486	0.1994	0.7480	0.0831	0.1835	0.2665		836.5948	836.5948	0.2706		843.3591

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	day		
Hauling	1.5100e- 003	0.1001	0.0277	4.5000e- 004	0.0140	7.1000e- 004	0.0147	3.8300e- 003	6.8000e- 004	4.5000e-003		50.1173	50.1173	3.4000e- 003	7.9800e-003	52.5813
Vendor	3.8200e- 003	0.1582	0.0556	7.4000e- 004	0.0271	9.1000e- 004	0.0280	7.7900e- 003	8.7000e- 004	8.6600e-003		80.4969	80.4969	3.2900e- 003	0.0121	84.1713
Worker	0.0124	8.3200e- 003	0.1006	2.7000e- 004	0.0329	1.8000e- 004	0.0330	8.7200e- 003	1.6000e- 004	8.8800e-003		27.1128	27.1128	9.2000e- 004	8.3000e-004	27.3840

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Total	0.0178	0.2666	0.1838	1.4600e-	0.0739	1.8000e-	0.0757	0.0203	1.7100e-	0.0220	157.7270	157.7270	7.6100e-	0.0209	164.1366
				003		003			003				003		

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/d	day		
Fugitive Dust					0.2469	0.0000	0.2469	0.0374	0.0000	0.0374			0.0000			0.0000
Off-Road	0.4659	4.4978	3.9857	8.6400e- 003		0.1994	0.1994		0.1835	0.1835	0.0000	836.5948	836.5948	0.2706		843.3591
Total	0.4659	4.4978	3.9857	8.6400e- 003	0.2469	0.1994	0.4463	0.0374	0.1835	0.2209	0.0000	836.5948	836.5948	0.2706		843.3591

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/	day		
Hauling	1.5100e- 003	0.1001	0.0277	4.5000e- 004	0.0140	7.1000e- 004	0.0147	3.8300e- 003	6.8000e- 004	4.5000e-003		50.1173	50.1173	3.4000e- 003	7.9800e-003	52.5813
Vendor	3.8200e- 003	0.1582	0.0556	7.4000e- 004	0.0271	9.1000e- 004	0.0280	7.7900e- 003	8.7000e- 004	8.6600e-003		80.4969	80.4969	3.2900e- 003	0.0121	84.1713
Worker	0.0124	8.3200e- 003	0.1006	2.7000e- 004	0.0329	1.8000e- 004	0.0330	8.7200e- 003	1.6000e- 004	8.8800e-003		27.1128	27.1128	9.2000e- 004	8.3000e-004	27.3840

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Total	0.0178	0.2666	0.1838	1.4600e-	0.0739	1.8000e-	0.0757	0.0203	1.7100e-	0.0220	157.7270	157.7270	7.6100e-	0.0209	164.1366
				003		003			003				003		

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	day		
Fugitive Dust					0.0848	0.0000	0.0848	9.1600e- 003	0.0000	9.1600e-003			0.0000			0.0000
Off-Road	0.4701	5.2102	3.5783	8.4700e- 003		0.2033	0.2033		0.1875	0.1875		813.4882	813.4882	0.2593		819.9710
Total	0.4701	5.2102	3.5783	8.4700e- 003	0.0848	0.2033	0.2882	9.1600e- 003	0.1875	0.1966		813.4882	813.4882	0.2593		819.9710

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/d	day		
Hauling	8.0000e- 005	5.0000e- 003	1.3800e-003	2.0000e- 005	7.0000e- 004	4.0000e- 005	7.3000e- 004	1.9000e- 004	3.0000e- 005	2.3000e-004		2.5059	2.5059	1.7000e- 004	4.0000e-004	2.6291
Vendor	1.9100e- 003	0.0791	0.0278	3.7000e- 004	0.0135	4.5000e- 004	0.0140	3.9000e- 003	4.3000e- 004	4.3300e-003		40.2485	40.2485	1.6500e- 003	6.0300e-003	42.0857

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Worker	6.2100e-	4.1600e-	0.0503	1.3000e-	0.0164	9.0000e-	0.0165	4.3600e-	8.0000e-	4.4400e-003	13.5564	13.5564	4.6000e-	4.2000e-004	13.6920
	003	003		004		005		003	005				004		
Total	8.2000e-	0.0883	0.0794	5.2000e-	0.0307	5.8000e-	0.0312	8.4500e-	5.4000e-	9.0000e-003	56,3107	56.3107	2.2800e-	6.8500e-003	58.4067
														0.00000	
	003			004		004		003	004				003		331.133.

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	day		
Fugitive Dust					0.0382	0.0000	0.0382	4.1200e- 003	0.0000	4.1200e-003			0.0000			0.0000
Off-Road	0.4701	5.2102	3.5783	8.4700e- 003		0.2033	0.2033		0.1875	0.1875	0.0000	813.4882	813.4882	0.2593		819.9710
Total	0.4701	5.2102	3.5783	8.4700e- 003	0.0382	0.2033	0.2415	4.1200e- 003	0.1875	0.1916	0.0000	813.4882	813.4882	0.2593		819.9710

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	lay							lb/d	day		
Hauling	8.0000e- 005	5.0000e- 003	1.3800e-003	2.0000e- 005	7.0000e- 004	4.0000e- 005	7.3000e- 004	1.9000e- 004	3.0000e- 005	2.3000e-004		2.5059	2.5059	1.7000e- 004	4.0000e-004	2.6291
Vendor	1.9100e- 003	0.0791	0.0278	3.7000e- 004	0.0135	4.5000e- 004	0.0140	3.9000e- 003	4.3000e- 004	4.3300e-003		40.2485	40.2485	1.6500e- 003	6.0300e-003	42.0857

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Worker	6.2100e-	4.1600e-	0.0503	1.3000e-	0.0164	9.0000e-	0.0165	4.3600e-	8.0000e-	4.4400e-003	13.5564	13.5564	4.6000e-	4.2000e-004	13.6920
	003	003		004		005		003	005				004		
Total	8,2000e-	0.0883	0.0794	5.2000e-	0.0307	5.8000e-	0.0312	8.4500e-	5.4000e-	9.0000e-003	56,3107	56,3107	2.2800e-	6.8500e-003	58,4067
									3.4000			30.3107	2.20UUe-	10.03000-003	20.400/
Total	0.2000e-	0.0003	0.0734	004	0.0307	004	0.0312	003	004	3.0000e-003	30.3107	30.3107	2.2800e- 003	0.0500e-005	56.4067

3.4 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay				lb/d	day					
Off-Road	0.5192	5.0407	6.5593	0.0103		0.2569	0.2569		0.2364	0.2364		992.7287	992.7287	0.3211		1,000.7554
Paving	0.0786					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5978	5.0407	6.5593	0.0103	-	0.2569	0.2569		0.2364	0.2364		992.7287	992.7287	0.3211		1,000.7554

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/e	day		
Hauling	6.1000e- 004	0.0400	0.0111	1.8000e- 004	5.5900e- 003	2.8000e- 004	5.8700e- 003	1.5300e- 003	2.7000e- 004	1.8000e-003		20.0469	20.0469	1.3600e- 003	3.1900e-003	21.0325

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Vendor	3.8200e-	0.1582	0.0556	7.4000e-	0.0271	9.1000e-	0.0280	7.7900e-	8.7000e-	8.6600e-003	80.4969	80.4969	3.2900e-	0.0121	84.1713
	003			004		004		003	004				003		
Worker	0.0124	8.3200e- 003	0.1006	2.7000e- 004	0.0329	1.8000e- 004	0.0330	8.7200e- 003	1.6000e- 004	8.8800e-003	27.1128	27.1128	9.2000e- 004	8.3000e-004	27.3840
Total	0.0169	0.2066	0.1672	1.1900e- 003	0.0655	1.3700e- 003	0.0669	0.0180	1.3000e- 003	0.0193	127.6566	127.6566	5.5700e- 003	0.0161	132.5878

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	lay							lb/d	day		
Off-Road	0.5192	5.0407	6.5593	0.0103		0.2569	0.2569		0.2364	0.2364	0.0000	992.7287	992.7287	0.3211		1,000.7554
Paving	0.0786					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5978	5.0407	6.5593	0.0103		0.2569	0.2569	-	0.2364	0.2364	0.0000	992.7287	992.7287	0.3211		1,000.7554

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/c	day							lb/d	day		
Hauling	6.1000e- 004	0.0400	0.0111	1.8000e- 004	5.5900e- 003	2.8000e- 004	5.8700e- 003	1.5300e- 003	2.7000e- 004	1.8000e-003		20.0469	20.0469	1.3600e- 003	3.1900e-003	21.0325

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Vendor	3.8200e- 003	0.1582	0.0556	7.4000e- 004	0.0271	9.1000e- 004	0.0280	7.7900e- 003	8.7000e- 004	8.6600e-003	80.4969	80.4969	3.2900e- 003	0.0121	84.1713
Worker	0.0124	8.3200e- 003	0.1006	2.7000e- 004	0.0329	1.8000e- 004	0.0330	8.7200e- 003	1.6000e- 004	8.8800e-003	27.1128	27.1128	9.2000e- 004	8.3000e-004	27.3840
Total	0.0169	0.2066	0.1672	1.1900e- 003	0.0655	1.3700e- 003	0.0669	0.0180	1.3000e- 003	0.0193	127.6566	127.6566	5.5700e- 003	0.0161	132.5878

Appendix B

Biological Resources Reconnaissance Survey



MEMORANDUM

To: Christina Birdsey, Chief Operating Office, Oxnard Harbor District

From: Dave Compton, Andrea Dransfield, Dudek

Subject: Biological Resources Reconnaissance Survey, Former Navy Property Restoration Project

Date: March 11, 2022 cc: Matt Valerio, Dudek

Attachment(s): Attachment A, Figures 1–3

Attachment B, Plant and Wildlife Species Observed

This memorandum provides the methods and results of a biological reconnaissance survey in support of the Former Navy Property Restoration (project). The project site (Attachment A, Figure 1) occurs near the Pacific Ocean, within a largely developed area of the Oxnard Harbor District in the City of Port Hueneme. Most land uses in the vicinity are associated with harbor activities, although a public path and beach, with an intervening strip of riprap, occur just south of the project site. The Port Hueneme Lighthouse is immediately west of the site. The project involves demolition of several abandoned structures associated with former Navy use. Potential impacts to biological resources are expected to be minimal due to the disturbed and developed nature of the site and surrounding area. Dudek conducted the biological reconnaissance survey to determine the potential for presence of sensitive biological resources, and recommend additional biological surveys, if necessary.

1 Methods

Prior to the field visit, Dudek conducted a literature review. This consisted of queries of the California Natural Diversity Database (CNDDB; CDFW 2022) and the U.S. Fish and Wildlife Service's Information for Planning and Consultation (IPaC) website (USFWS 2022a), for potentially occurring special-status plant and wildlife species, the National Hydrography Dataset (NHD; USGS 2022) and National Wetlands Inventory (NWI; USFWS 2022b) for potentially occurring aquatic resources, and the City of Port Hueneme Local Coastal Program (City 2006) and the 2045 Port Hueneme General Plan (City 2021) for biological resources policies applicable to the project. Dudek also examined aerial images of the project site, to inform the assessment of what sensitive resources, if any, may occur on the project site, and therefore to better focus the biological reconnaissance survey.

Dudek biologist Andrea Dransfield conducted the biological reconnaissance survey on January 4, 2022, under favorable conditions (Table 1). Ms. Dransfield walked the entire project site (Figure 2) to inspect it for potential to support sensitive biological resources; to record land covers, including natural vegetation communities, if any occur; and to record all plant and wildlife species observed. The survey emphasized the potential occurrence of nesting birds, roosting bats, and protected trees, in addition to habitat for other special-status wildlife and plants, aquatic resources (wetlands and waters) under the jurisdictions of permitting agencies, and sensitive vegetation communities. All land covers were mapped on a hard copy aerial-based field map and digitized in the office by a

geographic information systems (GIS) technician. Buildings were inspected for potential to support roosting bats, including maternity roosts, but the survey did not include a focused search for bats. Dudek recorded species of all trees observed, in addition to recorded diameter at breast height (DBH) to assist in determining whether any trees occurring on site may be protected. However, the survey did not serve the purposes of a focused trees assessment, pursuant to preparation of a tree protection plan.

Table 1. Survey Date, Time, and Conditions

Date	Start/End Time	Personnel	Conditions
January 4, 2022	11:00 a.m1:40 p.m.	Andrea Dransfield	57°F–59°Fahrenheit; 5%
			cloud cover; 1–2 mph winds

2 Results

The literature review, including the review of aerial images, suggested that few, if any, sensitive biological resources were likely to occur within or adjacent to the project site. The site visit confirmed that only anthropogenic land covers occurred on the project site, and that the surrounding area is heavily developed. The only land covers observed were developed, disturbed, and ornamental (Figure 3). The "developed" land cover consisted of the existing structures and associated paved driveways, parking areas, and walkways. The "disturbed" land cover consisted of graded, maintained (mowed) areas surrounding the buildings, which support non-native grasses such as Bermudagrass (*Cynodon dactylon*) and bromes (*Bromus* spp.) and non-native forbs such as cheeseweed (*Malva parviflora*), redstem storke's bill (*Erodium cicutarium*), and narrowleaf plaintain (*Plantago lanceolata*). The "ornamental" land cover on the site consisted of several ornamental trees, including Chinese junipers (*Juniperus chinensis*), Brazilian pepper trees (*Schinus terebinthifolius*), Mexican fan palms (*Washingtonia robusta*), and individual myoporum (*Myoporum laetum*) and crimson bottlebrush (*Callistemon citrinus*), and other ornamental plants such as American century plant (*Agave americana*).

Of the 27 plant species observed (Attachment B), only two (both common herbaceous species) were native: silver bur ragweed (*Ambrosia camissonis*), a perennial species usually associated with the upper portion of beaches, and telegraphweed (*Heterotheca grandiflora*), an annual that is highly tolerant of disturbance. All wildlife species observed were common species associated with the habitats occurring on the project site, except for two bird species, western gull (*Larus occidentalis*) and brown pelican (*Pelecanus occidentalis*), associated with the nearby beach and marine habitat, and only observed flying over the area. California brown pelican (*P.o. californicus*), the locally occurring subspecies of the latter of these two species, was formerly listed as endangered under the federal Endangered Species Act (ESA) and is considered fully protected by the California Department of Fish and Wildlife, a designation that protects it from disturbance at nesting sites and roosts. A full list of wildlife observed during the reconnaissance survey is in Attachment B. No wetlands or waters occur within or immediately adjacent to the site, although the Pacific Ocean, which is considered waters of the U.S., is only approximately 110 feet south of the site.

The buildings and the trees and other ornamental vegetation on the project site potentially support nesting birds between approximately February and the end of August. Bats have some potential to roost in the buildings proposed to be demolished. Due to the highly disturbed nature of the site, the lack of native vegetation, and its isolation from natural habitats, no special-status plant or wildlife species are expected to occur on the site itself. A narrow strip of land south of the public access path, approximately 25 feet south of the project site, is highly disturbed and unlikely



to support any special-status plants. In addition, the nature of the project, to demolish several buildings on the site, would not result in impacts to vegetation or plants offsite. Surrounding lands, particularly the nearby beach (approximately 70 feet south of the site) and the Pacific Ocean, may have potential to support special-status wildlife species. Western snowy plover (*Charadrius nivosus nivosus*) and California least tern (*Sternula antillarum browni*) are known to nest at nearby Ormond Beach, within 2.0 miles southeast of the project site, and they may have some potential to nest on the beach nearer the site. In addition, the stretch of beach approximately 70 feet south of the site is designated as federal critical habitat for western snowy plover (USFWS 2022c). Protected marine species may occur in the Pacific Ocean, such as several species of fish listed under the federal ESA and marine mammals such as harbor seal (*Phoca vitulina*) that are protected under the Marine Mammal Protection Act. Finally, the project site and surrounding area are not expected to be important for wildlife movement, as the site is within a fenced area not accessible to larger and medium-sized wildlife, and it is not connected with any significant patches of native vegetation.

3 Discussion

As noted above, the project site itself is not expected to support special-status plant or animal species; it does not have potential to support any waters or wetlands that would be under the jurisdictions of resource agencies governing dredge or fill of these resources, or any other impacts to wetlands or water quality; and it does not support any sensitive vegetation communities, or any natural communities of any kind. All the trees on the project site are planted, ornamental, non-native species, and none are protected. Therefore, no formal assessment by a certified arborist is necessary. However, the project may have potential to impact other sensitive resources on the site itself, including nesting native birds and bats, and noise from the project may have the potential to result in impacts to special-status wildlife species occurring near the site, such as western snowy plover or California least tern. Additional surveys, discussed below, may shed light on the potential for some of these resources to occur adjacent and south of the site. Field surveys for these resources would clarify the potential risk to the project from these species occurring in the vicinity at the time of project implementation. Although several sensitive species are likely occur in the nearby waters of the Pacific Ocean, it is unlikely the project would result in any impacts to these species, due to the distance at which habitat occurs, the low likelihood that noise from the project would reach levels to disturb marine species, and the high level of ambient noise in the harbor area, which likely habituates many species to high noise levels.

3 Recommendations

Based on the results and discussion above, we recommend the surveys:

• If demolition work must occur during the nesting bird season (February 1 through August 31), a pre-activity nesting bird survey will be conducted to determine if active nests are present within or adjacent to thework area. Specifically, prior to any demolition activity, surveys for active nests will be conducted by a qualified ornithologist within 300 feet of the project site and no more than 7 days prior to the start of activities in order to identify any nests that are present and to determine their status. The survey and no disturbance buffer will be established in coordination with the CDFW and USFWS (as a portion of thearea to survey includes the beach, which is federally designated critical habitat for snowy plover). If activenests are found a minimum no disturbance buffer of 100 feet for non-listed bird species and a 300 feetfor state-or federally-listed bird species will be maintained until the breeding season has ended, or until



the biologist determines that the birds have fledged and are no longer reliant upon the nest or parental care for survival. The minimum buffer set by USFWS or CDFW will be maintained for identified nests of any listed species. Any variance from these buffers will be supported by the biologist and agencies will be notified in advance of implementation of a no disturbance buffer variance. Results of the surveys should be provided to CDFW and USFWS.

If construction activities occur during the breeding/pupping season (April to September), an emergence survey for bats will be performed to determine the potential for all of the buildings to support maternity roosts. The surveys would include an inspection of the inside of the structures for roosting bats and sign of roosting bats (urine staining, guano) and active acoustic monitoring for bats emerging from the structures at and following dusk. The active acoustic survey would require the presence of up to two biologists observing the buildings for emerging bats at dusk and equipped with acoustic recording devices that record bat vocalizations. Recordings will be analyzed using specialized software following the survey, to determine which bats are present and their potential for using the structures for maternity roosts. In addition, several days of passive acoustic monitoring, and analysis of the recordings collected, will be conducted to gather data on bat presence over a longer period. Passive monitoring involves the deployment of unattended and secured devices over at least 3 nights or longer. All survey results, including field data sheets, will be provided to the California Department of Fish and Wildlife (CDFW). Locations of all roosts should be kept confidential to protect them from disturbance. If potential roosts are determined to be present then the roosts must be analyzed further to determine the species present and if maternity roosts are present. If maternity roosts of any bat species are present, the CDFW will be notified and no work will occur within 100 feet of the roost location of any bat species until the end of the pupping season.

This memo provides a brief assessment of biological resources and recommended follow up surveys and measures based on the analysis performed. The environmental document prepared for compliance with the California Environmental Quality Act (CEQA) should include the above recommendations along with the analysis of impacts.



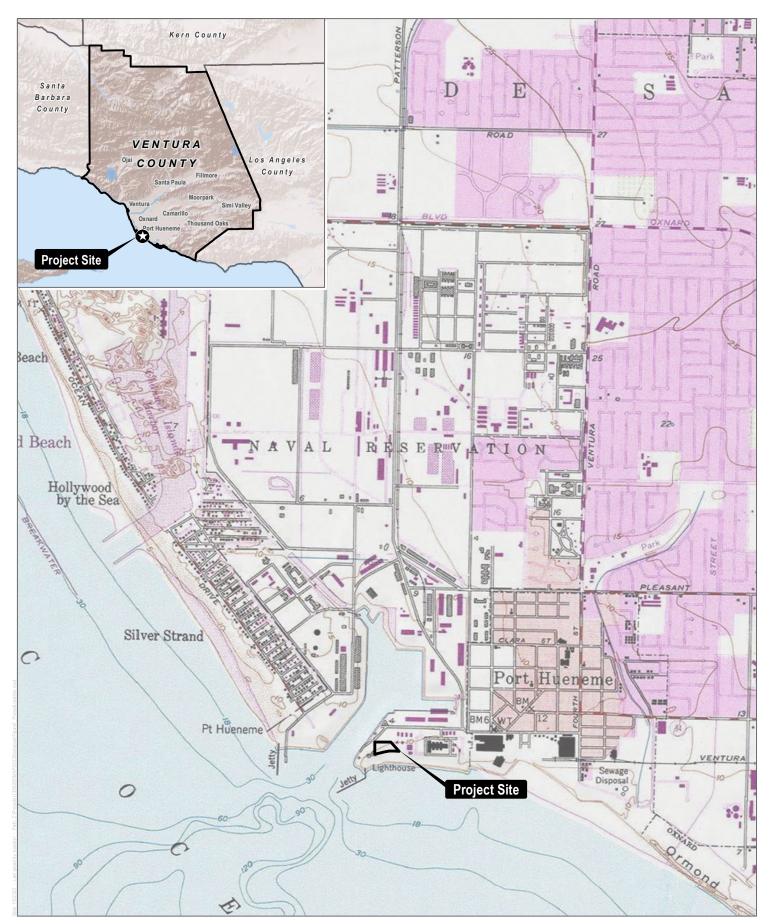
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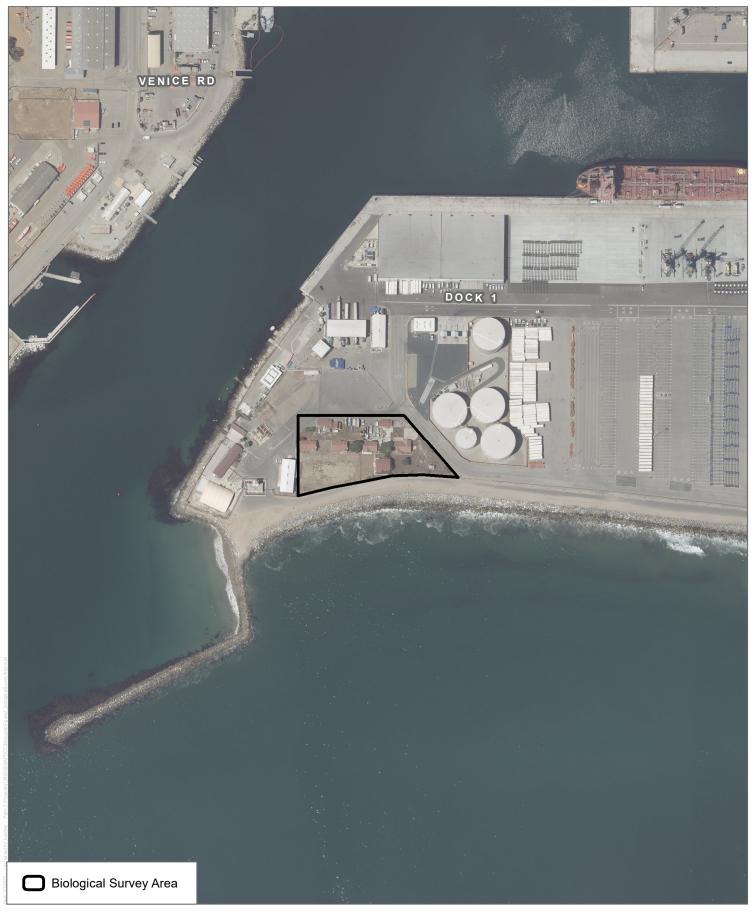
Attachment A

Figures 1 - 3



SOURCE: USGS Topological Survey, 7.5-Minute Series, Oxnard Quadrangle

FIGURE 1
Project Location



SOURCE: Sanborn 2020





Attachment B

Plant and Wildlife Species Observed

Plant Species

Eudicots

AIZOACEAE - FIG-MARIGOLD FAMILY

- * Carpobrotus edulis hottentot fig
- * Mesembryanthemum nodiflorum- slenderleaf iceplant

ANACARDIACEAE - SUMAC FAMILY

Schinus terebinthifolius - Brazilian peppertree

ANACARDIACEAE - DOGBANE FAMILY

Carissa macrocarpa – natal plun

ASTERACEAE - SUNFLOWER FAMILY

Ambrosia chamissonis - silver bur ragweed

- Gazania linearis treasureflower
- Helminthotheca echioides bristly oxtongue
 Heterotheca grandiflora telegraphweed
- * Taraxacum officinale common dandelion

BRASSICACEAE - MUSTARD FAMILY

Cakile maritima – European searocket

CHENOPODIACEAE - GOOSEFOOT FAMILY

- * Atriplex semibaccata Australian saltbush
- Chenopodium murale nettleleaf goosefoot

GERANIACEAE - GERANIUM FAMILY

* Erodium cicutarium - redstem stork's bill

MALVACEAE - MALLOW FAMILY

* Malva parviflora - cheeseweed mallow

MYRTACEAE - MYRTLE FAMILY

* Melaleuca citrina - crimson bottlebrush

OXALIDACEAE - OXALIS FAMILY

Oxalis pes-caprae – Bermuda buttercup

PLANTAGINACEAE - PLANTAIN FAMILY

* Plantago lanceolata - narrowleaf plantain



SCROPHULARIACEAE - FIGWORT FAMILY

* Myoporum laetum - myoporum

SOLANACEAE - NIGHTSHADE FAMILY

* Nicotiana glauca - tree tobacco

Gymnosperms and Gnetophytes

CUPRESSACEAE - CYPRESS FAMILY

* Juniperus chinensis - Chinese juniper

Monocots

AGAVACEAE - AGAVE FAMILY

* Agave americana - American century plant

ARECACEAE - PALM FAMILY

- Phoenix canariensis Canary Island date palm
- * Washingtonia robusta Washington fan palm

POACEAE - GRASS FAMILY

- * Bromus diandrus ripgut brome
- Bromus madritensis compact brome
- Cynodon dactylon Bermudagrass
- * Hordeum vulgare common barley

Wildlife Species - Vertebrates

Reptiles

IGUANIDAE - IGUANID LIZARDS

Sceloporus occidentalis - western fence lizard

Birds

CORVIDAE - JAYS, MAGPIES, AND CROWS

Corvus brachyrhynchos - American crow

FRINGILLIDAE - FINCHES

Haemorhous mexicanus - house finch



LARIDAE -GULLS, TERNS AND SKIMMERS

Larus occidentalis - western gull

PARULIDAE - WOOD WARBLERS AND ALLIES

Setophaga coronata – yellow-rumped warbler Setophaga townsendi – Townsend's warbler

PASSERELLIDAE - NEW WORLD SPARROWS

Junco hyemalis – dark-eyed junco Melospiza melodia – song sparrow

PELICANIDAE - PELICANS

Pelecanus occidentalis - brown pelican

TROCHILIDAE - HUMMINGBIRDS

Calypte anna - Anna's hummingbird

TYRANNIDAE - FLYCATCHERS

Sayornis saya - Say's phoebe

Mammals

FELIDAE - CATS

- * Felis catus domestic cat
- * signifies introduced (non-native) species



Appendix C

Built Environment Inventory and Evaluation Report

Built Environment Inventory and Evaluation Report

Former Navy Property Restoration Project, Hueneme, California

JULY 2022

Prepared for:

THE PORT OF HUENEME OXNARD HARBOR DISTRICT

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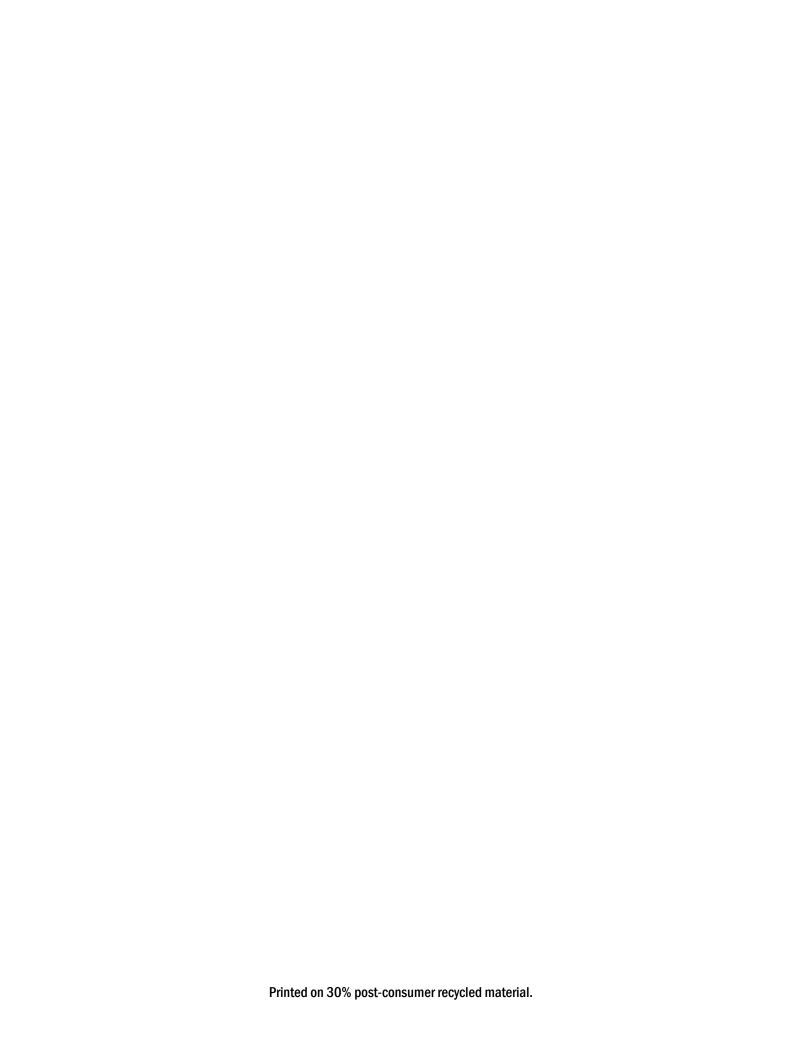


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Acronyms and Abbreviations

Acronym/Abbreviation	Definition
APN	Assessor's Parcel Number
BERD	Built Environment Resource Directory
CEQA	California Environmental Quality Act
CHRIS	California Historical Resources Information System
City	City of Port Hueneme
County	County of Ventura
CRHR	California Register of Historical Resources
MPD	Multiple Property Document
NHPA	National Historic Preservation Act
NPS	National Park Service
NRHP	National Register of Historic Places
Port	Port of Hueneme Oxnard Harbor District
Proposed Project	Port Hueneme Lighthouse Project
SCCIC	South Central Coast Information Center
Study area	Built Environment Study Area
USCG	United States Coast Guard
USDI	United States Department of the Interior
UCSB	University of California, Santa Barbara



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Executive Summary

The Port of Hueneme Oxnard Harbor District (the Port) retained Dudek to complete a Built Environment Inventory and Evaluation report (report) for the Former Navy Property Restoration Project (proposed project). The purpose of the proposed project is to demolish existing buildings on a 1.7-acre area (proposed project site) that would then be graded and paved for use in ongoing Port operations. This report documents Dudek's efforts to identify and evaluate built environment properties older than 45-years (historic era) located within and adjacent to the proposed project site that may be subject to direct or indirect impacts from the proposed project. This report was prepared in conformance with California Environmental Quality Act (CEQA) Guidelines Section 15064.5 for historical resources, and all applicable local guidelines and regulations to assess potential project related impacts to built environment resources under CEQA.

Efforts to identify historical resources within and adjacent to the proposed project site included the following components: (1) a California Historical Resources Information System (CHRIS) records search conducted at the South Central Coast Information Center (SCCIC), California State University, Fullerton, addressing the proposed project site plus a 0.25-mile radius buffer; (2) a review of previous documentation pertaining to the Port Hueneme Light Station; (3) development of a Built Environment Study Area (study area) to assess potential direct and indirect impacts to historic era buildings and structures; (4) an intensive-level survey by a qualified architectural historian; (5) recordation and evaluation of historic era properties located in the study area under National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR) designation criteria, and an update for one previously recorded property located in the vicinity of the proposed project site; and (6) an assessment of project-related impacts to historical resources in conformance with CEQA.

Dudek architectural historian Andrew Bursan conducted an intensive-level survey for built environment resources within and adjacent to the proposed project site on January 4, 2022. Following review of the CHRIS record search and additional background research of the study area, Dudek identified one property, the Port Hueneme Light Station, which contains buildings and structures over 45 years of age that require formal recordation and evaluation as part of this study.

The Port Hueneme Lighthouse (P-56-152840) is located within the built environment study area and has been previously determined individually eligible for the NRHP and the CRHR following consultation with the State Historic Preservation Officer (SHPO) in 2013 (USCG_2013_0520_001). This resource retains a California Historic Resource Status (CHRS) code in the California Built Environment Resource Directory (BERD) of 2S2 (Individually determined eligible for NRHP by consensus through Section 106 process, Listed in the CRHR). Dudek agrees with the 2003 NRHP evaluation findings that the Port of Hueneme Lighthouse appears individually eligible for listing under the NRHP Multiple Property Document (MPD), Light Stations of California and the NRHP MPD, Light Stations in the United States. A DPR form update for the property was prepared in conjunction with the proposed project verifying that existing information recorded about the Lighthouse remains accurate, which can be found in Appendix A.

While the Port Hueneme Lighthouse (P-56-152840) is a CEQA historical resource, none of the previous documentation provided evaluations the associated historic age buildings, collectively referred to in this report as the Port Hueneme Light Station. This report concludes that the Port Hueneme Light Station as a multi-component site does not appear eligible under any NRHP or CRHR designation criteria. A detailed analysis of this property is presented in Section 4. Therefore, the Port Hueneme Light Station is not considered a historical resource for the



purposes of CEQA. A California Department of Parks and Recreation Series 523 form set (DPR form set) was prepared for the property and can be found in Appendix A.

A detailed impacts analysis was prepared in Section 5 of this report for the Port Hueneme Lighthouse, the only CEQA historical resource within the built environment study area. The project finding for built environment historical resources under CEQA is **less than significant**, **no mitigation required**. No further work regarding built environment CEQA historical resources is required.



1 Introduction

Dudek was retained by The Port of Hueneme Oxnard Harbor District (the Port) to complete a Built Environment Inventory and Evaluation report (report) for the Former Navy Property Restoration Project (proposed project). This section provides a description of the proposed project, including information about the location, setting, and proposed project activities. This section also presents a description of the Built Environment Study Area, project personnel, and the regulatory setting for the proposed project. This report is intended to provide baseline information to support the proposed project's environmental review and help inform development of mitigation measures to address potentially significant impacts related to cultural resources.

1.1 Project Location

The proposed project site is located on approximately 2-acres of developed land that was formerly part of the Light Station grouping of properties at the SW end of the District's jurisdiction, on the east side of the main channel adjacent to Lighthouse Promenade in the City of Port Hueneme, California, 93041 (Figure 1 Project Location). The project site contains existing buildings 400, 404, 406, 408, 416, 422, and 428 along with existing landscaping and ancillary structures (Figure 2 Project Site).

1.2 Project Description

The proposed disturbance footprint is anticipated to be approximately 1.7 acres and an area of approximately 1.5 acres would be graded and paved after demolition. Demolition, grading, and paving are expected to take approximately 90 days total.

The project would demolish seven buildings, as well as removal of landscaping and support structures on an approximately 2-acre area (see Figure 2, Project Site). The buildings were formerly part of the Port Hueneme Light Station. The demolition would be followed by grading and paving to allow for open backlands space offering flexible use options for ongoing port operations. Total duration of demolition and construction activities is estimated at approximately 90 days, and construction activities would occur 8 hours each day, 6 days each week (Monday – Saturday, excluding holidays).

Project Demolition

The project would demolish a total of approximately 37,500 square feet of developed impervious areas. A total of seven (7) buildings, totaling approximately 11,000 square feet would be demolished. The square footage of each existing building to be demolished is as follows:

Building 400: 1,930.47 +/- square feet
Building 404: 2,944.2 +/- square feet
Building 406: 840.14 +/- square feet
Building 408: 1,342.50 +/- square feet
Building 416: 1,499.41 +/- square feet



Building 422: 938.02 +/- square feet

Building 428: 1,513.33 +/- square feet

In addition, approximately 37,514, square feet of existing impervious surfaces would be demolished.

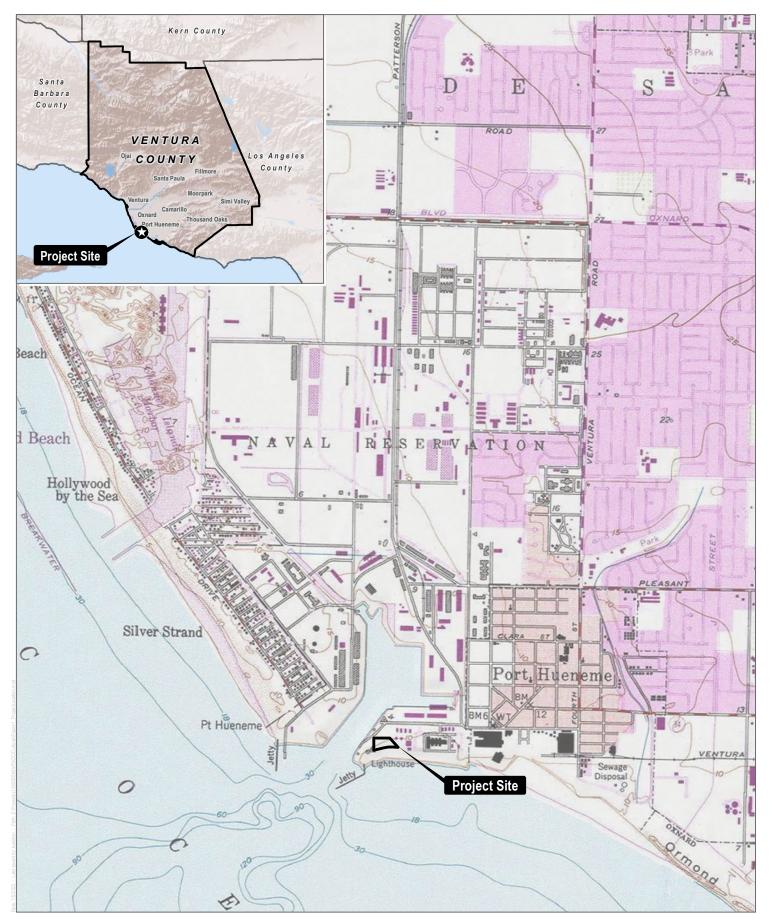
Project Construction

Construction would involve site improvements, principally grading and paving an area of approximately 1.5 acres from which the seven buildings are demolished and removed.

Post Construction Use

No new uses or increased capacity of use is proposed as part of this project. The project would enable the Port to more efficiently process existing operations and market driven increases in goods movements through the port by providing flexible, open, backlands space.





SOURCE: USGS Topological Survey, 7.5-Minute Series, Oxnard Quadrangle

FIGURE 1
Project Location

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SOURCE: Sanborn 2020

Project Site

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1.3 Built Environment Study Area

The Built Environment Study Area (study area) for the proposed project is illustrated on Figure 3, Built Environment Study Area. To establish an appropriate project study area under CEQA all potential project-related impacts that could result in a substantial adverse change in the significance of a known or unknown historical resource should be considered. Project construction and implementation activities are considered a substantial adverse change if they would cause physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired (14 CCR 15064.5). Current professional practice commonly groups activities that could cause a substantial adverse change to historical resources into direct and indirect impact considerations. Direct impact considerations are commonly linked to physical project construction activities including, but not limited to, demolition, construction-related ground borne vibration, and property takes. Impact considerations commonly considered indirect are largely related to potential post-construction effects of a project that is near a historical resource, such as noise, shadow, or visual effects, depending on the circumstances.

As such, the study area consists of the geographic area, within or adjacent to, a proposed project boundary that directly or indirectly may experience changes in the character or use of historical resources as a result of construction and/or implementation of the project, as defined by CEQA. The determination of the study area is influenced by a project's planned activities or setting, the scale and nature of the project, and the different kinds of impacts (direct or indirect) that may result from the project. As such, the study area for this project includes the proposed project site, as described in Section 1.1, Project Location, and the associated and adjacent buildings comprising the Port Hueneme Light Station (Figure 3, Built Environment Study Area: Port Hueneme Light Station). A description of the proposed project's study area boundaries and the methodology used to delineate those boundaries are detailed below.

1.3.1 Built Environment Study Area Delineation

To understand the potential for impacts to historical resources for the proposed project, Dudek established a study area consisting of the proposed project site's outer boundary and any adjacent buildings to gather information on buildings older than 45-years that might sustain direct and/or indirect effects as a result of the proposed project. Dudek cultural resources staff conducted a desktop survey of all properties within the study area and then consulted the results of the CHRIS record search (Section 2.1) and the BERD (Section 2.2) to determine if the study area contained any properties that have been previously identified or evaluated as historical resources (individually or as part of a historic district). Finally, staff reviewed the current project plans to determine where potential impacts could occur, both on-site and potentially at adjacent historic properties such as noise, alterations to setting, visual effects, and potential construction-related vibration effects.

The records search indicated that a single listed historical resource, the Port Hueneme Lighthouse (P-56-152840), is located adjacent to the project site and therefore requires consideration in the built environment study area (see Section 2.1.2, Previously Recorded Cultural Resources, for more information). For this reason, the Port Hueneme Lighthouse is included in the study area and is addressed throughout this report.

Dudek conducted additional desktop research through ParcelQuest, Google Earth Pro, the University of California, at Santa Barbara (UCSB) historic aerial photograph database, and Nationwide Environmental Title Research (NETR) to assess potential effects to properties adjacent to the project site that were more than 45-years of age at the time of

survey (ParcelQuest 2022, Google Earth Pro 2022, UCSB 2022, and NETR 2022). This additional research identified seven (7) buildings that were constructed more than 45-years ago and appear to be associated with the Port Hueneme Lighthouse. This collection of buildings is referred to as the Port Hueneme Light Station throughout this report. The Port Hueneme Light Station is a multi-component site. The results of the preliminary desktop survey concluded that the Port Hueneme Light Station, which contains buildings and structures over 45 years of age, requires formal recordation and evaluation as part of this study. The following buildings within the study area are not of historic age: Shed (Building 432, c. 1985), Seawater Intake System Building (Building 444, c. 2010), and Stellar Biotechnologies Building (Building 452, c. 452) were included in the study area due to their close proximity to both the proposed project site and the Lighthouse. Therefore, the study area encompasses the following buildings listed below in Table 1, Buildings within the Built Environment Study Area. Construction and implementation of the proposed project will result in demolition of seven buildings within the study area. The buildings within this study area are considered to form the Port Hueneme Light Station property. As part of this report, the buildings comprising the Port Hueneme Light Station were recorded and evaluated as a multi-component site under NRHP, CRHR, and local designation criteria (see Section 4, Results of Identification and Evaluation Efforts).

Table 1. Buildings within the Built Environment Study Area

USCG Building Number	Building Name	Year Built	Located within the Project Site?
416	Keepers' Residence	c. 1939	Yes
422	Garage (associated with Buildings 416 and 428)	c. 1939	Yes
428	Keepers' Residence	c. 1939	Yes
440	Lighthouse	1941	-
448	Barracks/Mess Hall	c. 1943	-
400	Keepers' Residence	1961	Yes
406	Garage (associated with Buildings 400 and 408)	1961	Yes
408	Keepers' Residence	1961	Yes
404	Building 404	c. 1978	Yes
432	Shed	c. 1985	-
444	Seawater Intake System	c. 2010	-
452	Stellar Biotechnologies Building	2019	-



SOURCE: Sanborn 2020

DUDEK

FIGURE 3
Built Environment Study Area

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1.4 Project Personnel

The associated fieldwork was conducted by Dudek Architectural Historian Andrew Bursan, MCRP, and this report and property significance evaluation was prepared by Dudek architectural historians Adrienne Donovan-Boyd, MSHP, Fallin Steffen, MPS, and Erin Jones, MA, and reviewed by Senior Architectural Historian/Historic Built Environment Team Leads Sarah Corder, MFA and Kathryn Haley, MA. Resumes for key personnel are provided in Appendix B, Preparers' Qualifications.

1.5 Regulatory Setting

1.5.1 Federal

1.5.1.1 National Register of Historic Places

While there is no federal nexus for this project, buildings within the study area were evaluated in consideration of NRHP designation criteria. The NRHP is the United States' official list of districts, sites, buildings, structures, and objects worthy of preservation. Overseen by the National Park Service, under the U.S. Department of the Interior, the NRHP was authorized under the National Historic Preservation Act, as amended. Its listings encompass all National Historic Landmarks, as well as historic areas administered by the National Park Service.

NRHP guidelines for the evaluation of historic significance were developed to be flexible and to recognize the accomplishments of all who have made significant contributions to the nation's history and heritage. Its criteria are designed to guide state and local governments, federal agencies, and others in evaluating potential entries in the NRHP. For a property to be listed in or determined eligible for listing, it must be demonstrated to possess integrity and to meet at least one of the following criteria:

The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of persons significant in our past; or
- C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded, or may be likely to yield, information important in prehistory or history.

Integrity is defined in NRHP guidance, "How to Apply the National Register Criteria," as "the ability of a property to convey its significance. To be listed in the NRHP, a property must not only be shown to be significant under the NRHP criteria, but it also must have integrity" (USDOI 1995). NRHP guidance further asserts that properties be completed at least 50-years ago to be considered for eligibility. Properties completed fewer than 50-years before evaluation must be proven to be "exceptionally important" (criteria consideration to be considered for listing).



1.5.2 State

1.5.2.1 California Register of Historical Resources

In California, the term "historical resource" includes but is not limited to "any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California" (California Public Resources Code Section 5020.1[j]). In 1992, the California legislature established the CRHR "to be used by state and local agencies, private groups, and citizens to identify the state's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change" (California Public Resources Code Section 5024.1[a]). The criteria for listing resources on the CRHR were expressly developed to be in accordance with previously established criteria developed for listing in the NRHP, enumerated below. According to California Public Resources Code Section 5024.1(c)(1–4), a resource is considered historically significant if it (i) retains "substantial integrity," and (ii) meets at least one of the following criteria:

- A. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
- B. Is associated with the lives of persons important in our past.
- C. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
- D. Has yielded, or may be likely to yield, information important in prehistory or history.

In order to understand the historic importance of a resource, sufficient time must have passed to obtain a scholarly perspective on the events or individuals associated with the resource. A resource less than 50-years old may be considered for listing in the CRHR if it can be demonstrated that sufficient time has passed to understand its historical importance (see 14 CCR 4852[d][2]).

The CRHR protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources. The criteria for the CRHR are nearly identical to those for the NRHP, and properties listed or formally designated as eligible for listing in the NRHP are automatically listed in the CRHR, as are the state landmarks and points of interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

1.5.2.2 California Environmental Quality Act

As described further below, the following CEQA statutes and CEQA Guidelines are of relevance to the analysis of archaeological, historical, and tribal cultural resources:

California Public Resources Code Section 21083.2(g) defines "unique archaeological resource."

- E. California Public Resources Code Section 21084.1 and CEQA Guidelines Section 15064.5(a) define "historical resources." In addition, CEQA Guidelines Section 15064.5(b) defines the phrase "substantial adverse change in the significance of an historical resource." It also defines the circumstances when a project would materially impair the significance of a historical resource.
- F. California Public Resources Code Section 21074(a) defines "tribal cultural resources."

- G. California Public Resources Code Section 5097.98 and CEQA Guidelines Section 15064.5(e) set forth standards and steps to be employed following the accidental discovery of human remains in any location other than a dedicated ceremony.
- H. California Public Resources Code Sections 21083.2(b)–(c) and CEQA Guidelines Section 15126.4 provide information regarding the mitigation framework for archaeological and historic resources, including examples of preservation-in-place mitigation measures; preservation-in-place is the preferred manner of mitigating impacts to significant archaeological sites because it maintains the relationship between artifacts and the archaeological context and may also help avoid conflict with religious or cultural values of groups associated with the archaeological site(s).

Under CEQA, a project may have a significant effect on the environment if it may cause "a substantial adverse change in the significance of an historical resource" (California Public Resources Code Section 21084.1; CEQA Guidelines Section 15064.5[b]). A "historical resource" is any site listed or eligible for listing in the CRHR.

The term "historical resource" also includes any site described in a local register of historic resources or identified as significant in a historical resources survey (meeting the requirements of California Public Resources Code Section 5024.1[q]).

CEQA also applies to "unique archaeological resources." California Public Resources Code Section 21083.2(g) defines a "unique archaeological resource" as any archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- 1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information.
- 2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- 3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

All historical resources and unique archaeological resources—as defined by statute—are presumed to be historically or culturally significant for the purposes of CEQA (California Public Resources Code Section 21084.1; CEQA Guidelines Section 15064.5[a]). The lead agency is not precluded from determining that a resource is a historical resource even if it does not fall within this presumption (California Public Resources Code Section 21084.1; CEQA Guidelines Section 15064.5[a]). A site or resource that does not meet the definition of "historical resource" or "unique archaeological resource" is not considered significant under CEQA and need not be analyzed further (California Public Resources Code Section 21083.2[a]; CEQA Guidelines Section 15064.5[c][4]).

Under CEQA a significant cultural impact results from a "substantial adverse change in the significance of an historical resource [including a unique archaeological resource]" due to the "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired" (CEQA Guidelines Section 15064.5[b][1]; California Public Resources Code Section 5020.1[q]). In turn, the significance of a historical resource is materially impaired when a project:

1. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register; or



- 2. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in a historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource
 that convey its historical significance and that justify its eligibility for inclusion in the California Register as
 determined by a lead agency for purposes of CEQA.

1.5.3 Local - City of Hueneme

1.5.3.1 Port Hueneme Municipal Code

Article VI, Section 3 – Flood Plain of the Port Hueneme Municipal code defines a 'Historic Structure' as a building or structure that is (Section 6046 – Definitions):

- a. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- c. Individually listed on the inventory of historic places maintained by the California Office of Historic Preservation and the Secretary of the Interior; or
- d. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified by the California Office of Historic Preservation and by the Secretary of the Interior.

1.5.3.2 Port Hueneme General Plan 2045

The Port Hueneme General Plan 2045 was adopted in September 2021 and provides policies, actions, and guidance for growth in the City through the year 2045. Specifically, the Land Use and the Conservation and Open Space Elements provide guidance for the management of historic resources in the City.

Land Use Element

The Land Use Element of the Port Hueneme General Plan 2045 offers strategies for balancing the preservation of Port Hueneme's character with proposals for new development by defining the "... land use designations, including uses, densities, intensities, and the Land Use Map that guides development in the City (City of Port Hueneme 2021: p. 2-1)."



Land Use Goal 1 seeks to continue existing land uses within the City that "create and sustain a strong, viable economic base for the City. The Port Hueneme Light Station is specifically addressed under *Policy LU-11* stating that the City will "Preserve and sustainably utilize historic resources, with special attention given to the mature trees and museum on Market Street, the Lighthouse, and the Bard Mansion (p. 2-8)."

Conservation and Open Space Element

The Conservation and Open Space Element establishes Goal 8: Maintenance and enhancement of the City's historic and cultural resources, which is intended to protect and maintain Port Hueneme's historic and archaeological resources. The policies introduced under this goal seek to ensure the proper protection and management of the City's historic resources in the future. COS policies 8-1 through COS 8-4 pertain specifically to built environment resources (City of Port Hueneme 2021: pp. 5-14, 5-14).

- COS 8-1 Identify, designate, and protect facilities of historical significance.
- **COS 8-2** Retain and protect areas of significant historical value for education and scientific purposes.
- COS 8-3 Ensure that developments adjacent to a place or structure found to be of historic significance are designed so that the use and architectural design protect the visual setting of the historical site.
- COS 8-4 Support the Ventura County Cultural Heritage Board in identifying and preserving Ventura County's heritage.



2 Research and Field Methods

This section summarizes Dudek's efforts to identify cultural resources in the study area.

2.1 California Historical Resources Information System Records Search

To identify historic properties located within the study area that might be affected by the proposed project, Dudek defined a study area that includes the proposed project site and a 0.25-mile buffer to identify previously recorded resources and cultural reports near the proposed project site. On January 12, 2022, Dudek conducted a search of the CHRIS at the South Central Coast Information Center, located on the campus of California State University, Fullerton. The search included any previously recorded cultural resources and investigations within a 0.25-mile radius of the project site. The CHRIS search also included a review of the NRHP, the CRHR, the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. Confidential Appendix C provides the records search results maps and a complete bibliography of all prior cultural resource studies occurring within 0.25-mile of the proposed project site.

2.1.1 Previous Technical Studies

Results of the cultural resources records search show that thirteen (13) previous cultural resource studies have been conducted within the records search area between 1980 and 2012. Of these, four (4) studies, VN-00236, VN-02684, VN-02978 and VN-03124, are mapped as overlapping the proposed project site. Table 2, below, summarizes all thirteen (13) previous cultural resources studies, followed by brief summaries of reports relevant to Built Environment Resources, that overlap the proposed project site: VN-02684, VN-02978 and VN-03124.

Table 2. Previously Conducted Cultural Resources Studies within the 0.25-mile Buffer

Report No.	Authors	Year	Title	Proximity to Proposed Project Area
VN-00236	Horne, Stephen	1980	Final Report: Onshore Cultural Resources Assessment, Union Oil Company Platform Gina and Platform Gilda Project Federal Lease Ocs P-0202 and P-0216, Offshore Southern California	Overlaps
VN-00715	Anonymous	1988	Draft Environmental Assessment Channel Islands Harbor Maintenance Dredging Six-year Program, Ventura County, California	Outside
VN-01584	MacFarlane, Heather	1994	Letter Report of Cultural Resources Investigations Underwater Remote Sensing Survey for the Us Army Corps of Engineers, La District Environmental Planning Division	Outside

Table 2. Previously Conducted Cultural Resources Studies within the 0.25-mile Buffer

Report No.	Authors	Year	Title	Proximity to Proposed Project Area
VN-02027	Uribe and Associates, William Self Associates	1998	Historic and Archaeological Resources Protection (HARP) Plan for the Years 1998- 2003 for Naval Construction Battalion Center, Port Hueneme Ventura County, California	Outside
VN-02436	Dolan, Christy	2004	Final Report: Evaluation of National Register of Historic Places Eligibility for Portions of Naval Base Ventura County, Port Hueneme Site, Port Hueneme, California	Outside
VN-02437	Dolan, Christy and Hirsch, Jennifer	2005	Final Report: Evaluation of National Register of Historic Places Eligibility for Nine Buildings on Naval Base Ventura County, Port Hueneme Site, Port Hueneme, California	Outside
VN-02684	Baker, Cindy L. and John Dougherty	2003	National Register of Historic Places Evaluation of Port Hueneme Lighthouse, Ventura County, California	Overlaps
VN-02922	Connors, Capt. C.B.	2008	Navy Plans to conduct maintenance dredging, beach replenishment, and a Confined Aquatic Disposal (CAD) project, in partnership with the Oxnard Harbor District, at the Army Corps of Engineers maintained Turning Basin adjacent to Naval Base Ventura County	Outside
VN-02978	Sharpe, Jim and Durio, Lori	2004	Groundwater Recovery Enhancement and Treatment (GREAT) Program, Cultural Resources Inventory Report	Overlaps
VN-03002	Conners, C.B.	2006	Draft Programmatic Agreement among the Commander Navy Region Southwest, The Commanding Officer, Naval Base Ventura County, and the California SHPO Regarding Navy Undertakings Within Ventura County, California	Outside
VN-03008	Baloian, Mary Clark and Randy Baloian	2003	Archaeological Monitoring and Discovery Treatment Plan for Proposed AT/FP Measures at the Naval Construction Battalion Center Port Hueneme and Naval Air Station Point Mugu Naval Base Ventura County	Outside
VN-03079	Pumphrey, Michael, Davis, Shannon, Wright, Catherine, Stringer-Bowsher, and Ghabhlain, Sinead	2010	Integrated Cultural Resources Management Plan for Point Mugu and Port Hueneme, Naval Base Ventura County, CA	Outside
VN-03124	McPherson, J.W.	2012	Point Hueneme Lighthouse, decommissioning of the Fresnel lens	Overlaps

C. Baker and J. Dougherty. 2003. *National Register of Historic Places Evaluation of Port Hueneme Lighthouse* (Report No. VN-02684)

This NRHP nomination form documents an evaluation of the historic Lighthouse and associated buildings. The purpose of the assessment was to evaluate the Port Hueneme Light Station for inclusion in the NRHP and does not include an evaluation of the property for CRHR. The nomination form documents the Light Station including the Port Hueneme Lighthouse and two c. 1939 keeper's quarters [Buildings 416 and 428]. The report concluded that the Port Hueneme Lighthouse appears eligible for listing in the NRHP under the NRHP Multiple Property Documentation (MPD) form for Light Stations of the United States and NRHP MPD Form for Light Stations of California under Criterion A for its association with the development of import-export trade in Southern California and under Criterion C as the only example of an Art Moderne-style Lighthouse in California. In addition to the Lighthouse, the nomination also addresses the two c. 1939 keeper's quarters concludes that due to a loss of integrity of setting and feeling, they do not appear eligible for listing on the NRHP. The fog signal structure is also not eligible due to its modern construction. An accompanying DPR form set form set was prepared by Tracy Bakic in 2003 in conjunction with the nomination form which recorded the Historic Port Hueneme Light Station but did not include a formal evaluation under NRHP or CRHR criteria (Bakic 2003).

The nomination form included the following significance assessment of the Lighthouse and the two c. 1939 keeper's quarters (C. Baker and J. Dougherty 2003: p. 8-3):

The Port Hueneme Light Station was constructed by the United States Coast Guard in 1941 to replace the original 1874 Point Hueneme Light Station that provided an important navigational aid to the frequently fog-choked entrance to Santa Barbara Channel. The lighthouse was constructed as part of the creation of the Port Hueneme harbor, the only deep-water port between Los Angeles and San Francisco. This port greatly enhanced the import-export economy of the region, and the light was crucial to its successful operation. As a result, the lighthouse appears to meet Criterion A as a significant structure. The lighthouse is an excellent representative example of the Art Moderne lighthouse design used by the Coast Guard on the Pacific Coast during the 1930s and early 1940s and, is the only one of its kind in California; as such, it appears to meet Criterion C as a significant structure. The lighthouse retains its integrity of location, materials, association, design, and workmanship, although its integrity of setting and feeling have been compromised by surrounding development since 1941, the lighthouse's date of construction and period of significance. As a result, the lighthouse appears to be an historical resource eligible for listing in the National Register of Historic Places under the nationwide Multiple Property NRHP Form for U. S. Lighthouses and Multiple Property NRHP Form for Light Stations of California.

Alterations to the two c. 1939 keeper's quarters originally associated with the lighthouse have greatly compromised their integrity of design, materials, and workmanship. Nearby development has destroyed their integrity of setting and feeling from the time of their construction. As a result of this loss, the keepers' quarters do not appear to be eligible for listing on the National Register of Historic Places. Also, the fog signal structure is a modern building and not eligible for listing on the National Register.

Sharpe, J. and L. Durio. 2004. Groundwater Recovery Enhancement and Treatment Program (GREAT), Cultural Resources Inventory Report (Report No. VN-02978)

The purpose of the Cultural Resources Inventory report was to assess the potential impacts the proposed GREAT program would have on known and unknown historical and archaeological resources. The survey identified two prehistoric sites (CA-VEN-666 and CA-VEN-726) and six historic sites (P-56-150013, P-56-150014, P-56-150020, P-56-150023, P-56-150028 and P-56-150029) previously recorded sites within the APE. It was determined that the proposed project would not have adverse effects on known site CA-VEN-666 because it was previously described as a "non-site" and archaeological monitoring would be required for CA-VEN-726. Mitigation recommendations included avoidance of several cultural resources as well as expanded cultural monitoring of any ground disturbance.

Lieutenant Commander J. W. McPherson. 2012. Letter Report on the Decommissioning of the Fresnel Lens at Point Hueneme Lighthouse (Report No. VN-03124)

The letter report documents correspondence between Lieutenant Commander J. W. McPherson and California State Parks Office of Historic Preservation, Ed Carroll about the proposed decommissioning of the historic Fresnel Lens at the Lighthouse that overlaps the current proposed project site. The purpose of the report was to determine any adverse effects of the proposed removal and relocation of the historic Fresnel lens within the Port Hueneme lantern room to the Lighthouse museum, located on site. The letter report was submitted and SHPO concurred with the finding of eligibility is relation to the Lighthouse and as the project work would be confined within the Lighthouse, agreed that no adverse effects on any historic structure or archaeological resources would occur.

The letter report included the following significance assessment (McPherson 2012: 4):

While Point Hueneme Light Station is not listed on the National Register of Historic Places (NRHP), it is assumed to be eligible for the NRHP, due to its Moderne architectural style (unique among California lighthouses) and its importance to the history of maritime navigation on the California coast. USCG is currently preparing nomination paperwork for the lighthouse. The historic Light Station included, in addition to the lighthouse, a fog signal building (replaced with a modern structure in 1998), at least two sets of quarters, and several other structures supporting USCG and Navy use of the property. The USCG now retains only the existing lighthouse and modern fog signal, as the USCG transferred this parcel, with the exception of the lighthouse and fog signal, to the Navy in 1974. Subsequently, the Navy transferred the land as a part of a 33-acre disposal to the Oxnard Harbor District in 1997. At present, the land underlying and surrounding the lighthouse and fog signal is owned by the city of Port Hueneme through the Oxnard Harbor District

2.1.2 Previously Recorded Cultural Resources

The CHRIS records search indicates that two (2) cultural resources have been previously recorded within at least approximately 0.25-mile of the proposed project site, one of which overlaps the proposed project site, and one adjacent. The only Built Environment resource recorded within the 0.25-buffer is the Port Hueneme Light Station. Table 3, below, documents the two (2) cultural resources within the proposed project site, followed by a brief summary of the reports.

Table 3. Previously Recorded Cultural Resources within the 0.25-Mile Buffer

Primary	Trinomial	Resource Name	Resource Type/Age	NRHP/CRHR Eligibility Status Code	Attributes	Proximity to Proposed Project Area
P-56- 000663	CA-VEN- 000663	Van Valkenburgh	Site/ Prehistoric	None	AP15 Habitation debris	Overlaps
P-56- 152840		Historic Port Hueneme Light Station	Building/ Historic	3D	HP2 Single family property; HP3 Multiple family property HP4 Ancillary building; HP11 Engineering structure; HP24 Lighthouse; HP34 Military property (historic use)	Overlaps

Status Codes: 3D = Appears eligible for NR as a contributor to a NR eligible multi-component resource through survey evaluation. **Notes:** NRHP = National Register of Historic Places; CRHR = California Register of Historical Resources.

Tracy Bakic. 2003. DPR 523 form set for the Port Hueneme Light Station (P-56-152840)

The DPR form set prepared for the Historic Port Hueneme Light Station (the Lighthouse and associated buildings and structures) in 2003 by Tracy Bakic of PAR Environmental Services Inc. (Bakic 2003) documents a 5-acre complex of buildings consisting of the 1941 Lighthouse, the 1939 keeper's quarters, the circa 1950s barracks, as well as associated outbuildings including garages. Bakic noted the prior 1874 wood-framed Lighthouse and associated structures had been demolished. The DPR form does not include a formal evaluation of the Light Station. An accompanying NRHP nomination form was completed in conjunction with the DPR form set prepared by C. Baker and J. Dougherty in 2003 which evaluated the Port Hueneme Lighthouse and two c. 1939 keeper's quarters buildings (C. Baker and J. Dougherty 2003).

The following text pertaining to the significance of the Lighthouse accompanied the DPR 523 form set in a summary letter prepared in 2003 by PAR Environmental Services Inc. for the U.S. Coast Guard (Bakic 2003):

The Port Hueneme Lighthouse has been determined eligible as part of a Multiple Property Listing of the National Register of Historic Places. The facility is in use as a navigational aid and actively managed by the Coast Guard. The station includes a fog signal building with attached lighthouse (1941) and a modern fog signal. The lighthouse is eligible under Criterion C as an excellent example of Art Moderne lighthouse design that reflects a construction style used for a number of twentieth century light stations. Its period of significance is 1941, its year of construction and activation.

2.2 The Built Environment Resource Directory

The Built Environment Resource Directory (BERD) files provide information, organized by county, regarding non-archaeological resources in the Office of Historic Preservation's inventory. The BERD contains information only for built environment resources that have been processed through the Office of Historic Preservation. This includes resources reviewed for eligibility for the NRHP, and the California Historical Landmarks programs through federal

and state environmental compliance laws, and resources nominated under federal and state registration programs. The BERD replaces the former Historic Properties Directory that previously provided evaluation status information for resources processed through the Office of Historic Preservation. Dudek accessed the BERD for Ventura County on June 16, 2022 and identified an entry pertaining to the Port Hueneme Light Station. According to the BERD, the Port Hueneme Light Station was most recently determined eligible following consultation with SHPO (USCG_2013_0520_001). (Appendix D) in June 2013 and presently has a CRHR status code of 2S2 (Individually determined eligible for NR by consensus through Section 106 process. Listed in the CR).

2.3 Additional Records Reviewed

In addition to reviewing the CHRIS search results and the BERD, Dudek conducted additional research to obtain prior documentation of resources within the Study Area to help ensure consistency in documenting the current status of the property as a historical resource. The following documents include coverage within the study area or pertain to past documentation efforts within the study area. These records were obtained through online searches, inquires with state agencies, or from the Port.

Bookwalkter. 1989. National Register of Historic Places Multiple Property Documentation Form: Light Stations of California.

This NRHP multiple property nomination form provides a comprehensive historic context covering Maritime Transportation in California between 1840 and 1940. Given the importance of maritime transportation in California history asserted in the context section, Light Stations are identified as an associated property type. The document provides registration requirements and an overview of common light station components, associated construction methods, architectural styles, physical condition, and physical setting.

Clifford. 2002. National Register of Historic Places Multiple Property Documentation Form: Light Stations in the United States.

This nomination form provides a comprehensive historic context covering the history and management of light stations throughout the United States beginning in 1789 through 2003. The document provides a broad overview of Lighthouse construction including tower and foundation types, common light station components (ancillary buildings and structures), regional adaptations and variations, site placement, and commonly employed architectural styles. The document also provides parameters for registration requirements, a hierarchy of character-defining features, a guide to assessing integrity and determining significance for this unique resource type.

Carol Roland-Nawi PhD., State Historic Preservation Officer. 2013. Section 110 Consultation for National Register of Historic Places Eligibility Determination for Port Hueneme Light, Ventura County (USCG_2013_0520_0001)

This letter confirms SHPO's concurrence with the US Coast Guard recommendation that the Port Hueneme Lighthouse is eligible for the NRHP under criteria A and C at the local level of significance under the *Light Stations* in the United States MPD.



Ventura County Cultural Heritage Board Staff. 2019. *Ventura County Historical Landmarks and Points of Interest.*

In 1980, the Lightworks in the Hueneme Lighthouse were designated as a Ventura County Historical Landmark. The lightworks were manufactured in 1897 in France and is composed of six handmade lens panels designed for an oil lantern and operated by timing gears and weights. It was originally installed in 1874 at the original Point Hueneme Lighthouse. In 1925, the light was electrified. In 1940 the original Lighthouse was moved and the Lightworks was moved into the 1941 Port Hueneme Lighthouse.

EZ Studio Inc. 2022. Port Hueneme Light Station Structural Evaluation and Assessment Report. 2022.

In 2022, EZ Studio Inc. was obtained to perform a structural evaluation and assessment of the existing residential & shop building located within The Port of Hueneme, CA. The structures, which are the basis for this report, are located adjacent to the Port of Hueneme Lighthouse (Appendix E).

2.4 Building Development and Archival Research

Historical Aerial Photographs

Dudek consulted historical aerial photographs through the Nationwide Environmental Title Research, LLC (NETR) to better understand any modern changes to the proposed project site and surrounding properties over time. All sources consulted are further discussed below for all available years.

Historical Aerials reviewed are available for the years 1929, 1945, 1947, 1959, 1962, 1966, 1970, 1975, 1982, 1984, 1985, 1994, 2001, 2005, 20010, 2012, 2014, 2016 (NETR 2022, UCSB 2022).

Table 4. Historical Aerial Photograph Review of Proposed Project Area

Year	Description
1929	The proposed project site is undeveloped, adjacent to the beach. A road runs east to west across the northern edge of the proposed project site. It leads to a complex of buildings to the west, likely the original Lighthouse and associated structures. A trail is visible leading from the original Lighthouse to the west.
1945	The channel for Port Hueneme is now west of the study area. Three buildings are visible to the northwest of the proposed project site (Buildings 422, 428, 416). Sidewalks connect the three buildings. The structures are laid out in a triangle formation, with one northernmost structure and two parallel, south. Additionally, a sidewalk is angled southwest from the most southwestern structure. This leads to the newly constructed Port Hueneme Lighthouse (Building 440), which is just southwest of the three buildings. Landscaped areas are evident around the buildings. An angled drive leads to the north side of the Lighthouse (Building 440), ending in a curricular parking area. Two buildings (the southern one is Building 448) are located northwest of the Lighthouse and several smaller structures are along the southern shore. A jetty now projects from the point just south of the Lighthouse. The eastern portion of the proposed study area is undeveloped.



Table 4. Historical Aerial Photograph Review of Proposed Project Area

Year	Description
1947	The three structures and paved areas are unchanged. All but one of the small buildings to the south are no longer extant. The area to the east remains undeveloped, but now appears to be an agricultural field with a dirt road running north to south.
1959	The three structures in the previous aerials are unchanged; an additional wider paved pathway was added between the northernmost structure and the two parallel southern structures, running north/south and east/west, essentially a "plus sign." The area appears to be well landscaped with sidewalks crossing over planted areas. The area east of the structures is open field. A large development is to the east of the Lighthouse (beyond the study area).
1962	The three structures and paved areas in the previous aerials are unchanged. The open area to the east has been developed with three additional buildings (Buildings 404, 406, and 408), in the same formation as the first three, one north and two parallel, in a line, south of the first. Each structure lines up with the original structures noted in the 1945 aerial. The area surrounding the new structures is graded, and a new road cuts southwest, south of the original three, toward the Lighthouse. There are angled sidewalks between the two southern structures and the northern one. The northern of the two structures to the northwest of the of the Lighthouse is no longer extant (Building 448 remains). The southeastern-most portion of the proposed project site is undeveloped except for a possible north to south trending road or path.
1966	Landscaping appears to have filled into the south of the new building group (Buildings 404, 406, and 408). A helicopter landing pad appears to the north of the six structures. The area to the north of the Lighthouse appears to have been landscaped where the building was demolished.
1970	No significant changes to the proposed study area
1975	A paved drive has been added between the two northern structures. Landscaping changes to the north of the buildings are evident and the helicopter landing area is no longer visible. No other significant changes are apparent.
1982	A new structure (Building 404) has been added to the proposed project site, south of the new structures noted in 1962. It is slightly larger and squarer in shape, positioned as the bottom point of a diamond shape layout of structures. There is a road that runs east/west just south of the new structure. There are currently ten visible structures within proposed project site.
2001	A large, paved road has been added along the east boundary of the proposed study area angled northwest. The area between the structures and the paved road is graded, with a paved section north of the most eastern structure. No other significant changes are evident.

2.5 Field Survey

2.5.1 Methods

Dudek Architectural Historian Andrew Bursan, MCRP, conducted an intensive survey of the built environment study area on January 4, 2022. Mr. Bursan meets the Secretary of the Interior's Professional Qualification Standards for architectural history. The survey entailed walking around the building exteriors of each of the two properties in the project site, documentation with notes and photographs, specifically noting character-defining features, spatial relationships, observed alterations, and examining any historic landscape features on the properties. All field notes, photographs, and records related to the current study are on file at the Dudek office in Pasadena, California.

2.5.2 Results

From the field survey, Dudek identified one property, the Port Hueneme Light Station, which contains buildings and structures over 45 years of age that require formal recordation and evaluation as part of this study. Section 4, Results of Identification and Evaluation Efforts, provides significance evaluation under the NRHP and CRHR criteria. The complete DPR 523 form set is provided in Appendix A to this report.



3 Historical Overview

The following historic context chronicles the pertinent information related to the history and contextual development of Port Hueneme. The following sections (3.1 through 3.3) contain sections of text presented verbatim in their entirety from multiple relevant documents including the *National Register of Historic Places Multiple Property Documentation Form: Light Stations in the United States* (Clifford 2002), the *National Register of Historic Places Registration Form for the Port Hueneme Lighthouse* (C. L. Baker and J. Dougherty 2003), and the *DPR 523 form set for the Port Hueneme Light Station* (Bakic 2003). References to figures, footnotes, and parenthetical citations within these sections of quoted text have been retained, however, they do not correspond to the Project Figures, the Exhibits, or the references presented throughout the remainder of this document and in the sources cited in Section 7, References (C.L. Baker and J. Dougherty 2003: pp 8-1 – 8-3; Clifford 2002: pp. 51-53; Bakic 2003: pp. P1-P2).

3.1 Development of Light Stations on the West Coast

The following text pertaining to the development of Light Stations along the West Coast of the United States is presented verbatim in its entirety from *National Register of Historic Places Multiple Property Documentation Form:* Light Stations in the United States (Clifford 2003: pp. 51-53).

West Coast

Prior to the building of the transcontinental railroad in 1869, the west coast of the United States was dependent upon maritime transportation for its connection to the rest of the world. North-south railroad links were not completed until 1887. Even road networks were not sufficiently developed until well into the 20th century. With this heavy dependence on water shipping, it is not surprising lighthouses were relatively early developments for the west coast.

Francis A. Gibbons of Baltimore, in addition to building Love Point Lighthouse (1872), and repair work on Point Lookout (1830) and Sharps Island (1838) lighthouses in Maryland, also built Bodie Island Lighthouse (1847), North Carolina, and Egmont Key Lighthouse (1848), Florida. Pleasonton said, Gibbons "has done some work very faithfully for us." Gibbons most ambitious lighthouse endeavor, however, was obtaining a contract in partnership with Francis X. Kelly in 1852 to construct the first eight lighthouses on the West Coast of the United States. They obtained a bark appropriately named Oriole, acquired materials and laborers, and sailed for the West Coast. Despite the wrecking of Oriole at the mouth of the Columbia River, these two Marylanders completed all eight lighthouses by 1856. 118

The first lighthouses on the west coast, designed at about the same time as the one at Blackistone Island (1851), Maryland, were intended to use the Argand lamp and parabolic reflector lighting system. The masonry tower rose from the foundation, through the center of the dwelling and through the roof. The towers of the eight lighthouses were each substantial enough to stand by themselves. The lanterns were not, however, of a proper size to support the recently adopted Fresnel lens. The District Inspector, Major Hartman Bache, was a pragmatic person, and solved the problems in different ways. At Farallon Islands, he tore down and rebuilt the lighthouse to receive a first-order lens. At the Point Loma Lighthouse (1855)

in San Diego, California, he decided to use the smaller third-order lens. But even with the smaller and lighter lens, he had to have the tower strengthened by increasing the thickness of the domical arch (the ceiling of the tower) to support a third order lens. 119 Many later West Coast light towers were integral to the fog signal building. Examples include Point Sur Lighthouse (1889), California; and Coquille River Lighthouse (1896) and Cape Arago Lighthouse (1934), both in Oregon.

Steel, in concrete structures, provides the tensile properties concrete lacks. Most major reinforced concrete towers are found on the West Coast where they are best adapted to the dangers of earthquake damage. Examples include Point Arena (1908) and Point Arguello Lighthouse (1934), both California. A series of artmoderne reinforced concrete lighthouses were built along the Alaska coast in the 1920s and 1930s, replacing earlier deteriorated wooden structures. 120 Examples include Cape Decision (1932), Cape Hinchinbrook (1934), Cape Spencer (1925), Cape St. Elias (1916), Five Finger Islands (1935), Point Retreat (1923), Sentinel Island (1935) and Tree Point (1935).

On the west coast, a number of lighthouses have been placed where coasting traffic makes a course change or leaves the coast. These are major lights, usually of the first order. Cape Mendocino (1868) in northern California was a turning point for both north and southbound traffic. This light was particularly important because it also guards vessels against nearby dangerous waters. Point Sur (1889) and Piedras Blancas (1879) are two lighthouses marking the point for departure or return to the coast, depending on the direction in which the vessel is traveling.

The west coast has several lighthouses built just offshore on rocks that are serious hazards to navigation. Tillamook (1881), Oregon, and St. George (1892), California, are two such lighthouses, and they were difficult and expensive to build because of their offshore location and rough seas. Tillamook served as a warning of the rock and as a guide to the Columbia River. St. George, on an offshore reef, guarded ships against a larger area of rocks and shoals.

3.2 Development of the Study Area

The following text is presented verbatim in its entirety from *National Register of Historic Places Registration Form* for the Port Hueneme Lighthouse prepared by C. L. Baker and J. Dougherty of PAR Environmental Services, Inc. in 2003. (C. Baker and J. Dougherty 2003: pp. 8:1-8:3).

Introduction

As long as there have been ships upon the seas, navigational aids have been part of the human endeavor. In the centuries before air travel, nations relied upon the safe passage of ships, including the United States. Congress passed the Lighthouse Act of 1789 to take responsibility for building and operating such aids along its coasts. Since then, the government has constructed over a thousand lighthouses, hundreds of fog signals and almost 200 floating light signals. The government created a specialized Lighthouse Board in 1852, which became the Bureau of Lighthouses in 1910. These early years make up the period of the Lighthouse Service, which merged with other federal maritime agencies in c. 1939 to establish the U.S. Coast Guard (United States Department of the Interior [USDI], National Park Service [NPS] 2002:2).

The United States Coast Guard (USCG) Port Hueneme Light Station grounds are located at the southern side of the Port Hueneme, Oxnard Harbor District basin entrance. The Port Hueneme Lighthouse is situated at the north side of the east entrance to the Santa Barbara Channel. The signal is important to navigation through the channel, which is typically fog-bound from July through October when inland temperatures rise. The port is the only deep-water port between Los Angeles and San Francisco and is important for foreign trade. The lighthouse grounds encompass an approximately five-acre area that includes extant USCG-built structures dating from circa 1938 to 1964. Historically, the Light Station grounds were located at the west end of the USCG Point Hueneme Reservation. With the formation of the Oxnard Harbor District in 1937 and the opening of the Port of Hueneme in 1940, the USCG facility officially became known as the Port Hueneme Light Station. In the 1970s the USCG Light Station was part of property transferred from USCG to the US Navy. In 1997 it was part of 33 acres of Naval property transferred to Oxnard Harbor District. USCG has retained ownership of the lighthouse (Brown 2003; Marsh 2003).

Historical Context

The Santa Barbara Channel extends 63 miles along the southern California coast between Point Fermine (near San Pedro) and Point Hueneme on the north end. The channel is defined on the west and south by the San Miguel, Santa Cruz, Santa Rosa, and Anacapa islands, known collectively as the Channel Islands. Portuguese explorer Juan Rodriguez Cabrihlo was the first to sail the channel in the fall of 1542. In the following centuries, Spanish missionaries established a scattering along the coast, but the population remained low until the years following the California Gold Rush and statehood in 1849. From that year forward, the number of ships traveling the waters of the channel would continue to grow (Nelson and Nelson 1993:29).

The original Point Hueneme Lighthouse site was located on 16.14 acres of the Rancho El Rio de Santa Clara o La Colonia, purchased by the U.S. Lighthouse Service for \$17. The first lighthouse on the point was constructed in 1874 and was activated the same day as the Point Fermin Lighthouse to the south; December 15, 1874. These two Victorian-style lighthouses marked the entrances to the Santa Barbara Channel, an important shipping lane between the southern California coast and the Channel Islands. Eventually four lighthouses were established along the channel (Nelson and Nelson 1993:29, 31).

The Point Hueneme site included the keeper's dwelling, identical to those built at East Brother in Oakland, California and Point Adams, Oregon, in addition to that at Point Fermin mentioned earlier. Water for the site was drawn from artesian wells, but by 1882 the wells were impure and rainwater from the station's roofs was collected in a 10,000-gallon tank. In 1889, the original white flashing oil light on the lighthouse was changed to a fixed red light. In 1892, it was changed to an occulating white light. In 1899, the Service installed a revolving fourth order Fresnel lens made by Barbier and Benard in 1897 (which remains to the present day) (Nelson and Nelson 1993:32).

In 1900, the Lighthouse Service purchased another adjacent 30 acres of the El Rio de Santa Clara o La Colonia for \$2,000. Of the combined 46 acres at the Point Hueneme site, various parcels would be carved out and sold to private companies or transferred to the Department of the Navy over the following century. By 1922, the station consisted of the Lighthouse Service and a Navy Radio Station. The Lighthouse included the original lighthouse with keeper's dwelling. The structure

had two sets of quarters to house the two lighthouse keepers and their families. In total, the dwelling had 1350 square feet of floor space comprising a total of eight rooms. The site also included a fog signal building, a carpenter shop, two storehouses, a barn, a hollow tile oil house and a concrete oil house. The navy's radio compass station, established three years earlier, consisted of three additional buildings on a separate portion of the lighthouse reservation. In 1928, the Naval Radio Compass Station was transferred to the Lighthouse Service (Lighthouse Service 1922).

In 1925, the oil lamp in the lighthouse was replaced with an electric light and in 1933 an electric motor was installed at the lighthouse to eliminate the hand-winding of the light's clockwork (Nelson and Nelson 1993:33).

In c. 1939, work began to create a deep-water port was created near the site, which required dredging the entrance along the point. In the process, the original lighthouse had to be moved. A local yachting club purchased the lighthouse/keepers' quarters structure and moved it across the harbor, although it was later demolished. The lighthouse lantern room was removed from the building before the move and replaced in the new lighthouse under construction (Nelson and Nelson 1993:32). Port Hueneme, as it became known, remains the only deep-water port between Los Angeles and San Francisco.

To replace the housing lost by the move of the lighthouse structure, the Coast Guard built two cottages for the keeper and assistant keeper in c. 1939. These structures were actually finished before the move. The two identical cottages were designed with roughly 1,230 square feet of interior space in each unit.

With the housing in place, the Coast Guard built the present lighthouse, which is a 48-foot-tall concrete tower rising from a one-story building. The focal plane is 52 feet above sea level and was lit with the original 1874 lantern and 1899 fourth order Fresnel lens operated by the original clockworks system. The light was activated in 1941. The tower is square and rises from the rectangular building below. The structure presents an Art Moderne architectural styling that was used at other Coast Guard lighthouses built during the period, most notably the Sentinel Island Lighthouse in Alaska (Nelson and Nelson 1993:32).

By 1958, the property included a mixture of USCG and Navy structures, including the new lighthouse/fog station, the c. 1939 keepers' quarters, a wood-framed barracks/mess hall, another single-story wood-framed keepers' quarters (north of the barracks), a small wood-framed garage, pump house (converted to an electrical vault by 1960), pressure tank, paint locker, radio mast, and a United States Navy winch house (with living quarters). The additional keeper's quarters (a house built circa 1927), small garage (circa 1927) and possibly the barracks and a radio building were moved to this location in 1940s from the USCG Radio Station that was about 1,000 feet to the east; the radio station buildings were probably moved due to World War II (WWII) military usage of the eastern end of the reservation.

Between 1961 and 1962 additional keepers' quarters were constructed (two houses and a garage) and the circa 1927 house, paint locker and radio building were removed. By the 1960s, the property had a separate fog signal structure located to the west side of the Navy's winch house.

The electrical vault was removed after 1973 and the circa 1927 garage was removed after 1980. The fog signal was removed in the late 1990s and replaced with the extant metal signal that is in the same location.

The lighthouse was automated in 1972. As a result, onsite housing became unnecessary. The station was disestablished in 1973 when a new Coast Guard station was constructed at Channel Islands Harbor. Some of the land at Port Hueneme Light Station was then transferred to the Navy at that time.

At present the approximately five-acre area (Figure 4) includes the 1940 lighthouse/fog station, the c. 1939 and 1962 keepers' quarters (including garages), heavily modified barracks building, modified circa 1950s Navy winch house, and several structures built less than 35 years ago by the Navy and subsequent tenants, such as Channel Islands Marine Resource Institute (CIMRI) and Stellar Biotech (formally called ABLAB). The modern buildings include metal-clad warehouses and a "test bed" house built in the late 1970s or early 1980s by the Navy for solar studies. The access road that enters the light station area and ends at the lighthouse/fog station as a cul-de-sac was in place over 50-years ago. The center of the cul-de-sac originally included a flagpole; the flagpole was removed at an unknown date.

In 1999, the lantern room and window frames of the lighthouse were painted red during a refurbishing effort. The original lighthouse's fourth order Fresnel lens is still in use at the current Port Hueneme Lighthouse (Nelson and Nelson 1993:32). The fog signal structure uses the original single diaphone type fog signal. The Port Hueneme facility is part of the Eleventh Coast Guard District.

3.2.1 History of Buildings within the Study Area

The following text is presented verbatim in its entirety from the California DPR form completed for the Port Hueneme Lighthouse prepared by Cindy L. Baker of PAR Environmental Services, Inc. in 2003. Building dates in the following text do not all correlate with current research presented in this report. Current USCG building identification numbers in brackets have been added by Dudek (Bakic 2003: pp.P1-P2).

The United States Coast Guard (USCG) Port Hueneme Light Station grounds are located at the southern side of Port of Hueneme, Oxnard Harbor District basin entrance. The grounds encompass an approximately five-acre area that includes extant USCG-built structures dating from circa 1938 to 1964. Historically, the light station grounds were located at the west end of the USCG Point Hueneme Reservation. With the formation of the Oxnard Harbor District in 1937 and the opening of the Port of Hueneme in 1940, the USCG facility officially became known as the Port Hueneme Light Station. In the 1970s the USCG light station was part of the property transferred from the USCG to the US Navy. In 1997 it was part of 33 acres of Naval property transferred to the Oxnard Harbor District. The USCG has always retained use of the lighthouse (Brown 2003; Marsh 2003), even while relinquishing ownership of the land.

Prior to the construction of the extant lighthouse/fog station in 1940, the light station included the previous 1874 wood-framed lighthouse with incorporated keepers' quarters, a temporary fog signal building, the circa 1938 keepers' quarters (two houses and a garage) [Buildings 422, 428, and

416], an artesian well and pump house. The 1874 lighthouse was barged across the harbor in February 1940 and was razed only a few years later. By 1958, the property included the new lighthouse/fog station [Building 440], the circa 1938 keepers' quarters) [Buildings 422, 428, and 416], a wood-framed barracks/mess hall [Building 448], another single-story wood-framed keepers' quarters (north of the barracks), a small wood-framed garage, pump house (the electrical vault by 1960), pressure tank, paint locker, radio mast, and a United States Navy winch house (with living quarters). The additional keepers' quarters (a house built circa 1927), small garage (circa 1927) and possibly the barracks and a radio building were moved to this location in 1940s from the USCG Radio Station that was about 1,000 feet to the east; the radio station buildings were probably moved due to WWII military use of the eastern end of the reservation.

Between 1961 and 1962 additional keepers' quarters were constructed (two houses and a garage) [Buildings 406, 408, 400] and the circa 1927 house, paint locker and radio building were removed. By the 1960s, the property had a separate fog signal structure located to the western side of the Navy's winch house; this fog signal was removed in the late 1990s and replaced with the extant metal signal that is in the same location. The electrical vault was removed after 1973 and the circa 1927 garage was removed after 1980.

At present the approximately five-acre area includes the 1940 lighthouse/fog station [Building 440], the c. 1939 and 1962 keepers' quarters (including garages) [Buildings 422, 428, and 416, 406, 408, 400], heavily modified barracks building circa 1950 [Building 448], modified circa 1950s Navy winch house, and several structures built less than 35-years ago by the Navy and subsequent tenants, such as the Channel Islands Marine Resource Institute (CIMRI) and Stellar Biotech (formerly called ABLAB). The modem buildings include metal-clad warehouses and a "test bed" house built in the late 1970s or early 1980s by the Navy for solar studies [Building 404]. The access road that enters the light station area and ends at the lighthouse/fog station as a cul-desac was in place over 50-years ago. The center of the cul-de-sac originally included a flagpole; the flagpole was removed at an unknown date.

3.3 Study Area Architectural Styles and Building Types

3.3.1 Architectural Style: Art Moderne (1928-1941)

According to the National Register of Historic Places Multiple Property Documentation Form: Light Stations in the United States, the Art Moderne architectural style was often employed in the design of Light Stations in the United States as demonstrated "... by the last caisson lighthouse built in the United States, Cleveland East Ledge Lighthouse (1943), Massachusetts; and Huron Harbor Lighthouse (1936), Ohio (Clifford 2003: pp. 41)."

The Art Moderne style describes a popular style of architecture that developed in the 1930s as a response to the Great Depression and as a response to the more opulent forms of the Art Deco style. While examples of the style predate the New Deal era, due to its frequent use by architects for federal projects under the New Deal 1933, the style has come to have a strong association with undertakings of the Public Works Administration (PWA). Art Moderne buildings are characterized by classical, conventional forms in line with the clean, formal Beaux Arts style which have been updated with modern stylistic elements drawn from the early 1920s Art Deco and Streamline

Moderne styles. The style was frequently employed in California in the construction of institutional buildings like public schools.

The character-defining features of the Art Moderne style include the following (Gebhard 1985: 578; Marter 2011: 147; McAlester 2013: 580):

- Basic classical balance and symmetry including horizontal proportions.
- Flat roofs usually with small ledge at roofline
- Rounded bays and projecting wings
- Use of piers in place of columns. Piers can be fluted, but generally contain no base or capitals.
- Inset windows arranged in vertical panels
- Wrap around, porthole and glass block windows
- Smooth exterior surfaces, usually stucco
- Use of relief sculpture and interior murals

3.3.2 Architectural Style: Spanish Colonial Revival (1915-Present)

According to the National Register of Historic Places Multiple Property Documentation Form: Light Stations in the United States, the Spanish Revival Style was often employed in the design of Light Stations in California as demonstrated "... in structures at Point Conception (1882), Point Vicente (1926), near Los Angeles, and Anacapa Light Station (1932), Anacapa Island, all in California (Clifford 2003: pp. 41)."

The Spanish Colonial Revival style has a rich history and popularity in California. The history of the style began with architectural forms originating in Spain that were carried to California during the Spanish Period. The Moors had a truly significant impact on the architectural development and heritage of Spain, when they brought with them a rich Muslim architectural tradition that was based on the Islamic patterns of architectural development seen throughout the Middle East. The combination of the Spanish and Moorish influence became known as the Hispano-Moorish (also referred to as Hispano-Moresque) architectural style. The height of Hispano-Moorish architecture in the Iberian Peninsula was from the 8th century to the 15th century and there was a significant revival during the 19th and early 20th centuries throughout Europe and the Americas (NGS 2017; Curl 2006).

During the Spanish colonial period in the late 1400s, the Spanish brought the architectural traditions known as the Hispano Moorish style to the Americas. The convergence of Christian and Islamic traditions seen in America is most often referred to as Mudèjar. The convergence of religious and architectural traditions during the Spanish Colonial period set the stage for the Spanish Colonial Revival architectural movement that gained great popularity in California following its formal debut at the San Diego Fair in 1915. Californian Architects Bertram G. Goodhue and Carleton M. Windslow helped to popularize the style well into the 1920s and 1930s, by which time the style was well represented in many coastal cities throughout California. The popularity of the style persisted well into the second half of the 20th century, spurring interest in new, offshoot styles such as the Monterey Revival and even the California Ranch House. During the 1970s and the 1980s, the style was frequently employed for commercial architecture including shopping malls and retail centers (Gebhard 1985: 573-4).

The character-defining features of the Spanish Colonial Revival style include the following (Gebhard 1985: 573-4):

- Asymmetrical façades
- Sprawling, irregular massing
- Low pitched roofs fitted with clay tiles
- Stucco walls that predominate over openings
- Limited number of openings, often deeply recessed into the wall surface and irregularly placed
- Arched entryways
- Heavy, wood entry doors with single or no light
- Decorative wrought-iron screens and details for windows, doors, balconies, and hardware
- Turned-wood grilles over windows and doors
- Relationship to outdoors through the use of French doors, terraces, courtyards and pergolas

3.3.3 Building Type: Light Tower

The following text pertaining to the Light Tower is presented verbatim in its entirety from *National Register of Historic Places Multiple Property Documentation Form: Light Stations in the United States* (Clifford 2003: p. 31).

The tower served principally as a support for the lantern that housed the light. The lantern was typically a cast-iron round, square, octagonal, or decagonal-shaped enclosure surrounded by an exterior stone or cast-iron gallery with railing. Access to the lantern at the top of the tower was via stone, wood, or cast-iron stairs which either wind around a central column or spiral along the interior sides of the tower walls (a few had straight sets of stairs which ran from landings around the tower interior). Windows in the tower were positioned to provide daylight onto the stairs. For taller towers, landings were provided at regular intervals. The top landing ended at the watch room where the keeper on duty ensured the optic was functioning properly. The lantern room above was usually reached via a ladder.

The most recognizable lighthouse type is the stand-alone tower such as Cape Hatteras Lighthouse. Lighthouses of this type come in many shapes including conical, square, octagonal, cylindrical, and even one triangular. Lighthouse towers may also be attached or integral to the keepers' dwellings, and in a few cases, fog signal buildings. Attached towers are those connected to a keeper's quarters to another structure, often by a hyphen; whereas integral towers are those structurally built into the structure with the tower extending through the roof.

3.3.4 Building Type: Keeper's Dwelling

The following text pertaining to the Keeper's Dwelling is presented verbatim in its entirety from *National Register of Historic Places Multiple Property Documentation Form: Light Stations in the United States* (Clifford 2003: p. 32).

Second in importance to the light tower, dwellings for light keepers and their families were generally, in the early days, simple 1 and 1/2-story wooden or stone structures. Since lighthouses had only one keeper, there was only one dwelling. After 1852 with the coming of the Fresnel lens and the Lighthouse Board, more keepers began to be assigned to light stations, and, of course, it became necessary to have more living accommodations. Keeper's quarters could be single, double,

triple, or even quadruple dwellings; they reflected the prevailing architectural styles, adaptations to geographical conditions, or regional tastes. Complaints by keepers concerning lack of privacy for their families finally persuaded the Lighthouse Board not to build tri-plex housing. By 1913, the U.S. Lighthouse Service stressed that a recent practice favors detached houses, insuring greater privacy, and giving better opportunity for yards and gardens.

For all practical purposes, prior to 1852 there were two types of land-based lighthouses: either a detached dwelling or an integral dwelling with the light tower rising out of the roof. The early integral towers had the tower supported by the roof system. As time went on with the lighting apparatus getting heavier, particularly with the advent of the Fresnel lens, the tower was supported from the foundation of the keeper's dwelling. The plans for Blackistone Island Lighthouse in the Potomac River, designed in 1852, clearly shows the support system ascending from the ground. The two-story dwelling had the wood tower rising through its center. Fortunately, this lighthouse needed only one keeper, even after the introduction of the Fresnel lens. In colder climates, such as New England and the Great Lakes, the light tower often was either attached to the dwelling or an enclosed passageway was built between the two structures.

3.3.5 Building Type: Garage

The following text pertaining to Garages is presented verbatim in its entirety from *National Register of Historic Places Multiple Property Documentation Form: Light Stations in the United States* (Clifford 2003: p. 36).

Some of the light stations received government-built barns where horses and perhaps a cow could be sheltered. With the coming of the automobile, light stations began to receive garages. Because they are recent, a number of garages survive; certainly more garages survive than barns. These structures were simple, standard garage structures with up to three bays. Many barns were converted to garages including Pensacola Light Station, Florida and Montauk Point Light Station, New York. The resourcefulness of lighthouse personnel is illustrated by the 1950s conversion of a garage into living quarters at Cove Point Light Station, Maryland. The garage had been moved and remodeled into a dwelling.

4 Results of Identification and Evaluation Efforts

To establish methods for evaluating the Port Hueneme Light Station in the study area, Dudek's architectural historians reviewed all available previous documentation for the site (see Section 2). The review led to the following outline of the property's development: the Port Hueneme Light Station is a multi-component site containing eight historic era buildings constructed between c. 1939 and 1961, and four modern buildings completed between 1977 and 2019.

In 2003, the Lighthouse was evaluated and found eligible for individual listing in the NRHP under the NRHP MPD form for Light Stations of the United States and NRHP MPD form for Light Stations of California under Criterion A for its association with the development of import-export trade in Southern California, and under Criterion C as the only example of an Art Moderne-style lighthouse in California. In addition to the Lighthouse, the nomination also addressed the two c. 1939 keeper's quarters originally associated with the Lighthouse and concludes that due to a loss of integrity of setting and feeling, they do not appear eligible for listing on the NRHP (C. Baker and J. Dougherty 2003). Additionally, the Port Hueneme Lighthouse was most recently determined eligible following consultation with SHPO (USCG_2013_0520_001) in June 2013 and presently maintains a CRHR status code in the BERD of 2S2 (Individually determined eligible for NR by consensus through Section 106 process, Listed in the CR). Dudek agrees with the 2003 NRHP evaluation findings that the Lighthouse appears individually eligible for listing under the NRHP MPD, Light Stations of California and the NRHP MPD, Light Stations in the United States. A DPR update form for this individual property can be found in Appendix A of this report. The DPR Update is limited to providing a brief description, summary of eligibility, conditions assessment since it was last recorded in 2013, and recent photographs of the site.

As a multi-component site, Dudek's architectural historians reviewed the Light Station property for its potential as a historic district. According to *National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation* (Bulletin 15), which is also used for CRHR, a historic district is defined as a resource that "possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development" (USDOI 1995: 5). Furthermore, Bulletin 15 states that, "A district must be significant, as well as being an identifiable entity. It must be important for historical, architectural, archeological, engineering, or cultural values" (USDOI 1995: 5).

The Light Station has expanded significantly since its initial construction. While eight of the buildings are over 45 years old, a significant number of alterations have been made since its original construction, specifically in the 1950s through the 1980s. Since 1977, four buildings have been added to the site adjacent to historic era components. Overall, the Light Station lacks temporal cohesion as a group of buildings and structures linked to a specific period of significance and does not rise to the level of consideration as a potential historic district. As such Dudek, has evaluated the Port Hueneme Light Station as a multi-component site.

In order to assess the historical significance and integrity of the buildings within the study area, the Port Hueneme Light Station was evaluated under the MPDs, *Light Stations of California*, *Light Stations of the United States*, and under CRHR criteria as a multi-component site. The property significance evaluation was prepared by Dudek architectural historians Adrienne Donovan-Boyd, MSHP, and Fallin Steffen, MPS who meet the Secretary of the

Interior's Professional Qualification Standards for architectural history. The following evaluation includes a current physical description of the Light Station property's elements, and an evaluation of the Property for the NRHP and the CRHR. A complete DPR 523 form set, including the previous evaluations and the updated evaluation information, is presented in Appendix A.

4.1 Registration Requirements for Listing in the NRHP as Part of a Multiple Property Document.

As stated earlier, the Port Hueneme Lighthouse (Building 440) is considered eligible as part of the NRHP MPD form *Light Stations of California* as well as the NRHP MPD form *Light Stations in the United States* (Bookwalkter 1989; Clifford 2002). The registration requirements stated in these documents is presented in the section below verbatim in their entirety as they directly apply to this resource. These registration requirements are stated here as they are applicable to apply to the station as a whole and are utilized in the evaluation of the overall property in Section 4.2.

NRHP MPD form Light Stations in California

The following registration requirements are provided for evaluating light stations in California (Bookwalkter 1989):

F. Associated Property Types

IV. Registration Requirements

"California's National Register-eligible light stations possess integrity of workmanship, materials, character, and design, as well as associative significance by virtue of their role in history and in their setting. Based upon association alone, light stations meet the National Register criteria, but additionally, the existence of a functioning complex implies necessary important relationships that are represented in the present day by the remaining buildings and structures of the station.

Historically, California light stations were composed, at a minimum, of a light tower, keeper's dwelling, and a fog warning device. Any number of additional ancillary buildings or structures could be original features (such as a cistern, or barn) or later additions (oil houses).

The minimum necessary requirements to adequately convey the historical function of a light station is the presence of a substantial lighthouse tower that was designed to hold a Fresnel lens, and one or more associated ancillary buildings.

Towers should be "substantial" to distinguish a lighthouse from the many "post beam" type structures that were erected in the late 19th and early 20th centuries. These were merely poles stuck in the ground with beacons stuck on top. They possess neither the necessary historical associations nor the architectural significance [...] (p. FIV-1)"

The integrity of each light station was evaluated with respect to all others in the state and in relation to its particular design, materials, and location. Those that failed to meet the registration requirements as set forth above in part F, section IV, were excluded from consideration for National Register nomination. Altogether, several light stations met minimum registration criteria but were



replaced from consideration by other light stations that more fully exemplified the character set forth in the registration requirements. Ten light stations are hereby presented for consideration to the National Register (p. Gl-1).

NRHP MPD form Light Stations in the United States

Additionally, the following registration requirements are provided for evaluating light stations within the context of the United States. These are detailed in the NRHP MPD form *Light Stations of the United States* (Clifford 2002: pp. 63-66).

Registration Requirements

What makes a lighthouse historic? Identifying historic lighthouses

Not all lighthouses or all structures at light stations are historic nor do all warrant preservation. But how does one determine historic significance of light station properties? How can one be certain that a light station or portion of a light station (only one or more structures of a light station versus a entire light station) warrant preservation? Perhaps the best method for determination, and the method required by the National Historic Preservation Act, is the criteria established for inclusion of properties in the National Register of Historic Places. Nearly 70 percent of all lighthouses in the United States (Coast Guard owned and otherwise) over 50 years old are either listed in the National Register of Historic Places or are determined eligible for listing, and the number is climbing as lighthouses and other light station structures are added to the list.

The National Historic Preservation Act of 1966 authorizes the Department of Interior to establish, maintain, and expand a National Register of Historic Places. This list is considered the official list of the Nations cultural resources worthy of preservation and is maintained by the National Park Service. The Register includes over 68,000 properties that have been recognized as having historic, architectural, archeological, engineering or cultural significance, at the national, state, or local level; this list grows steadily as more properties are identified and nominated each year. The nominations are maintained both on paper and in a computerized database.

Hierarchy of Character-Defining Features

The many structures and features of a light station should be considered cumulatively in accessing its integrity. The tower is vital to defining the station. Keeper's quarters are universal to light stations; sound signal buildings are not. The secondary structures that support the operation of the aid to navigation are significant, but their exclusion does not necessarily preclude eligibility for listing in the National Register. The following is a priority listing of the physical elements to consider.

- 1. *Tower:* Minimum consideration is daymark feature, i.e., shape and color to identify it to mariners. Does the tower still have its daymark characteristic? Daymark does not necessarily include presence of a lantern. For example, Bald Head Lighthouse meets only that minimum requirement.
 - Lantern: Ideally the light tower should have a lantern used during its period of significance. Lanterns did change over some lights' operational history to accommodate different lenses and operational requirements. An accurate replica lantern made of suitable materials is

better than no lantern. A lighthouse without a lantern, Piedras Blancas Light or Egmont Key Light, for example, are eligible, however they should not be considered significant for architecture engineering under Criterion C, but could qualify as significant for transportation under Criterion A.

- b. Lens: Ideally, the light tower should have an operational lens that was used during its period of significance. The next preference would be a non-operational lens used during its period of significance. A replacement Fresnel lens for a lens of the same order and characteristics is next in order of preference and then a Fresnel lens replacement lens of a different order or characteristic. This order of preference takes into account the historical practice of replacing lenses damaged in operation with a spare lens of the same order and characteristic from the inventory in storage. The damaged lens was then repaired and placed in storage until needed elsewhere. Also, the signal characteristics were modified as needed, to better serve the needs of the mariner.
- c. *Interior:* Original access to the lantern should be intact, including original stairway, ladderways, and service room. Original interior detailing, such as molding, doors, door hardware, cabinetry also contribute to integrity.
- d. Operational Features: Mechanisms for rotating the lens, lens pedestal, and ventilators.
- e. Attached Structures: Towers were often built with attached work rooms, oil rooms, keeper' quarters, and fog signal buildings. It is preferable that these attached structures remain in place.
- 2. Keepers' Quarters: The presence of a keeper's quarters is preferable to a station without its keeper's quarters. A keeper's quarters that retains its configuration from the period of significance is preferable to one that does not. This also applies to assistant keeper's quarters.
- Sound Signal and Sound Signal Building: Its presence, if part of the operational history, is preferable
 to none at all. The presence of the sound signal equipment is extremely rare and, therefore, especially
 significant.
- 4. Oil house, generator house, fuel tanks, workshop, which support the operation of an aid to navigation add to the completeness of a station.
- Other subsidiary structures which add to the completeness of a station: a boathouse, garage/barns, pier, tramways, elevated walkways (transportation related) cisterns/wells, storage buildings, privies (support keeper)
- 6. Architectural features, such as gargoyles, finials, architectural detailing



4.2 The Port Hueneme Light Station (Multi-Component Site)

4.2.1 Overview of Site

The Port Hueneme Light Station is located on the south side of the Port Hueneme harbor entrance in Ventura County, California (see Figure 3). The historic era buildings that remain on the site include the following:

- Lighthouse, Building 440, 1941
- Keeper's Residence, Building 416, c. 1939
- Garage, Building 422, c. 1939
- Keepers' Residence, Building 428, c. 1939
- Barracks/Mess Hall, Building 448, c. 1943
- Keepers' Residence, Building 400, 1961
- Garage, Building 406, 1961
- Keepers' Residence, Building 408, 1961
- Four buildings constructed after 1977: Building 404 (c. 1978), Building 432 (c. 1985), Building 444 (c. 2010), and Building 452 (2019)

The Port Hueneme Light Station is divided into several distinct areas. Historically, a maintained, concrete, walkway connected the buildings. Today, the walkways are unmaintained and deteriorated (Exhibit 1). The Lighthouse (Building 440), located between two modern buildings at the southern end of the site, is the Station's most distinctive building (Exhibit 2). The Art Moderne-style Lighthouse (Building 440) sits with the primary façade facing north in a paved area on the southern portion of the study area. To the west is the Stellar Biotechnologies Building (Building 452), a modern barrel roof structure. To the east of the Lighthouse (Building 440), is a modern, metalclad storage shed (Building 432), the Barracks/Mess Hall (Building 448), and the Seawater Intake System (Building 444) (Exhibit 3). The Barracks/Mess Hall (Building 448) is the only historic era building to the west of the Lighthouse and was constructed in c. 1943. The building has been heavily altered since its construction. East of the Lighthouse (Building 440) and the Shed (Building 432) is a collection of three buildings set in a triangle formation. These buildings represent the oldest buildings on the site, predating the 1941 Lighthouse by approximately one year. The collection consists of three buildings constructed in c. 1939, Building 406, which was originally a garage, and two associated Keepers' Residences (Buildings 428 and 416) (Exhibit 4). Buildings 408, 400, and 406 were constructed in 1961 and are located to the west of the c. 1939 grouping (Exhibit 5). These buildings are arranged in a similar triangular fashion as the c. 1939 grouping. Building 406 was historically a two-car garage associated with the two 1961 Keepers' Residences (Buildings 408 and 400) (Exhibit 6). Building 404, constructed to the south of Buildings 408 and 400, was constructed in c. 1978 (see Exhibit 5).



Exhibit 1. View looking southeast at the Lighthouse (Building 440), the Keepers' Residences (Building 416, 428) and garage (Building 422) (National Archives #205582837: c. 1941).



Exhibit 2. Overview of the western portion of the site. Shown from left to right is the modern day Shed (Building 432), the Port Hueneme Lighthouse (Building 440), Building 452, and the Barracks/Mess Hall (Building 448) (View looking southwest) (IMG_0282)



Exhibit 3. View looking southeast at the Keepers' Residence (Building 428) and c. 1985 Shed (Building 432) (IMG_0498).



Exhibit 4. View looking east at the Keepers' Residence (Building 416), (408), and modern era multi-use building, Building 404 (IMG_0500).



Exhibit 5. View looking north at the Keepers' Residence (Building 408) and c. 1978 Building 404 (IMG_0477)



Exhibit 6. View looking east at Building 406 (left), Building 400 (center) and Building 408 (center). Modern developments are visible east of the proposed project site in background (IMG_0478)

4.2.2 Port Hueneme Light Station Elements

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The Port Hueneme Light Station has eight historic era buildings spread across the southwestern point of the peninsula. The site includes the Lighthouse (Building 440: 1941), two Keepers' Residences (Buildings 428 and 416: c. 1939), two Keepers' Residences (Buildings 408 and 400: 1961), two buildings that were historically Garages (Building 422: c. 1939 and Building 406: 1961), a former USCG Barracks/Mess Hall (Building 448: c. 1941), a contemporary shed (Building 432: c. 1985), a contemporary mixed-use building (Building 404: c. 1978). Table 5 below includes brief current descriptions of each of these elements.

Table 5. Survey Results: Buildings in the Built Environment Study Area

Building Number- Name	Photograph	Year Built	Descriptions	Observed Alterations	Architectural Style
440- Lighthouse	Looking southwest at the north and east elevations (IMG_0264) Looking south at the north elevations (IMG_0266)	1941	The Port Hueneme Lighthouse and Fog Station exhibits an Art Moderne architectural style with a rectangular plan that is constructed on a concrete slab foundation. The attached one-story Fog Station is supported by a concrete perimeter wall foundation and large, chamfered support footings and pillars. The parapeted roof over the single-store fog station is flat reinforced concrete supported from the interior with steel I-beam ceiling joists and crossbeams. The Lighthouse's forty-eight-foot-tall square tower extends from the center of the Fog Station's north (main) elevation. The Lighthouse tower also has chamfered support columns, that include a pedestal and tiered finial, positioned at each corner. The Lighthouse tower is topped with a concrete slab that is supported from the interior with steel I-beam ceiling joists and crossbeams. The second and third levels of the Lighthouse retain their original concrete floors and an original quarter-spiral steel ladder with checkered floor plate treads leads to the lantern room. The lantern room walls are constructed of steel, including a crisscross sash located around the upper half of the room. The arched, glazed, steel door provides access to the observation deck, which is guarded by metal railings. The lantern room's roof, a steel conical roof, is topped with a pointed finial and metal ball. The roof serves a heat dispersing vent. Building 440's fenestration, except for one window, have original multi-light metal sash windows. The window directly above the entrance was altered in 1990 to feature a single light fixed window with "Point Hueneme Lighthouse/Established 1874/Current Lens Installed 1874/Present Tower Built in 1990" painted onto it. Above the fixed window is a bronze USCG plaque. The single entrance, located in the center of the building's north (main) elevation is an aluminum-framed glass door flanked by two narrow, vertical sidelights. The exterior elevations of the Lighthouse and fog station are clad in stucco.	 The original entrance was altered from a paneled wood double door to an aluminum-framed glass door flanked by two narrow, vertical sidelights. A type "F" diaphone and steel latter affixed to the south (rear) elevation of the building and a steel ladder on the west elevation were removed. The original rail that guarded the observation deck was replaced. The original Lighthouse's lens has been removed 	Art Moderne

Table 5. Survey Results: Buildings in the Built Environment Study Area

Building Number- Name	Photograph	Year Built	Descriptions	Observed Alterations	Architectural Style
432-Shed	Looking southwest at the north and east elevations (IMG_0277)	c. 1985	Building 432 is a rectangular-shaped, prefabricated, two-story building clad in raised-seam metal. Three mechanical vent units line the building's ridgeline. The building has limited windows that are comprised of aluminum-framed sliders. A corrugated metal roof supported by wood boards projects from the building's east elevation.	Wood-frame, corrugated metal shelter added to building's east elevation. Wood-frame, corrugated metal shelter added to building's east elevation.	No Discernible Style
400- Keepers' Residence	Looking southwest at the north and east elevations (IMG_0452)	c. 1961	Building 400 is a cross-gable L-shaped building that features an intersecting gable-roofed wing that projects from the western side of the south elevation to form a shallow porch. The building's roof is medium pitched, has shallow, overhanging eaves, and is clad in Spanish tile. The porch roof is supported by square wood posts. Triangular slatted attic vents are located in the peaks of the gable ends and fascia boards line each elevation. Exterior gutter systems are located along the north and south elevations. The building's fenestration is currently covered in wood boards and is not visible. Entrances are comprised of plain wood doors. A chimney protrudes from the building's roofline. An ornate two-arch wash basin is attached to the south elevation of Building 400.	 Gutters added to north and south elevations. Original doors replaced. Windows boarded up Paved area added to north of residence. 	Spanish Colonial Revival

Table 5. Survey Results: Buildings in the Built Environment Study Area

Building Number- Name	Photograph	Year Built	Descriptions	Observed Alterations	Architectural Style
404- Building 404	Looking northeast at the west and south elevations (IMG_0437)	c. 1978	Building 404 is a two-story building with a largely rectangular plan that features a saltbox style roofline. The northern facing moderately sloped roof shelter's the second story and there is a single-story, pent roof projection also extending from the building's north elevation. The southfacing roof slopes dramatically to the first story before the west side of the roof extends over a shallow porch while the western half terminates at the elevation's edge. Rafters continue past the roof's point of termination and end at the shallow porch. Shallow pent roofs also extend from the building's west elevation to shelters a centered double door entrance way, which has been infilled with vertical wood boards, and a wood door with a fixed top-center window. The building's fenestration is comprised of aluminum-framed sliding windows. Building 404's elevations are clad in vertically scored T1-11 plywood panels and the roof is clad in fish-scale shingles colored and arranged to mimic a Spanish-tile roof.	 Original windows replaced. Original roof appears to have been replaced. Doors infilled or replaced. 	Post Modern
406-Garage	Looking south at the north elevations (IMG_0385)	c. 1961	Building 406, a two-car garage, is a stucco-clad one-story building constructed on a rectangular slab foundation. The building's moderately pitched side-gable roof has a cascading-gable effect created by two wings that extend from the core segment's east and west elevations. The roof is clad in fish-scale shingles colored and arranged to mimic a Spanish-tile roof. Two louvered, rectangular vents are in the gable walls. All elevations feature wood fascia boards. An external gutter system runs along the building's north and south elevations. The building has replacement aluminum-framed casement windows. The north (main elevation) of Building 406 features two garage doors. The eastern garage door has two symmetrical fixed windows protected by wire mesh. The windows on the west garage doors have been covered with fabric and are not visible. The building's east and west elevations feature a single, centered, multi-light, aluminum-frame casement window. Building 406's south (rear) elevation has two symmetrical windows on the building's main core. The building's wings feature wood-panel man doors in wood frames.	 Original multi-light wood-framed windows replaced with aluminum-frame sliding windows. Original Spanish tile roof appears to have been replaced with shingles arranged and colored to imitate Spanish tile. Gutters added to north and south elevations. Fascia boards removed from north and south elevations. Pedestrian doors on rear elevations replaced. 	Spanish Colonial Revival

Table 5. Survey Results: Buildings in the Built Environment Study Area

Building Number- Name	Photograph	Year Built	Descriptions	Observed Alterations	Architectural Style
408 Keepers' Residence	Looking north at the south elevation (IMG_0452)	c. 1961	Building 408, a Keeper's Residence, is a two-story, Single-Family Residence with a rectangular plan, raised foundation, and stucco cladding. The cross-gable roof is moderately pitched and has shallow eaves, is clad in Spanish tiles, and has an external gutter system that stretches across the north (rear) elevation and extends the east portion of the south (main) elevation. Louvered, rectangular vents are located in the gable walls. A brick chimney protrudes from the center of the roof's ridgeline. A protruding front facing gable located on the west side of the south (main) elevation shelters two multi-light casement windows and the primary entrance, a plain wood door, on the west half of the south elevation is a set of paired aluminum frame casement windows. The label "1304" is stenciled on the south elevation.	Decorative shutters removed.	Spanish Colonial Revival
416 Keepers' Residence	Looking northeast at the south and west elevations (IMG_0355)	c. 1939	Building 416, a Keeper's Residence, is identical to Building 428 as it was constructed for the same purpose at the same time. The residence is a two-story, Single-Family Residence comprised of a basement and main floor. The building has a rectangular plan, raised foundation, and stucco cladding. The side-gable roof is moderately pitched and has shallow eaves, is clad in Spanish tiles, and has an external gutter system located on the north and south elevations. The building's fenestration includes a variety of aluminum-framed windows often positioned over original wood sills. Building 416 has two chimneys, one of which protrudes from the eastern half of the roofline, and the other that dominates the building's east elevation. The two entrances, located on the north (main) and south (rear) elevations are plain wood doors and accessed by low stoops that extend to create a porch. The porches are sheltered by pent roofs supported by square wood posts. On the south elevation, a concrete stairwell, with a metal rail, which leads to the building's basement. The basement steps and entrance is sheltered by a pent roof that protrudes from the base of the main floor.	 Original multi-light wood-framed windows replaced with aluminum-frame sliding windows. Gutters added to north and south elevations. Fascia boards removed from north and south elevations. 	Spanish Colonial Revival

Table 5. Survey Results: Buildings in the Built Environment Study Area

Building Number- Name	Photograph	Year Built	Descriptions	Observed Alterations	Architectural Style
422 Garage	Looking southwest at the north and east elevations (IMG_0295)	c. 1939	Building 422, originally a two-car garage, is a stucco-clad one-story building constructed on a rectangular slab foundation. The east elevation has "1307" painted on the building, suggesting this was a previously used building number. The building's moderately pitched side-gable roof has a cascading-gable effect created by two wings that extend from the core segment's east and west elevations. The roof is clad in fish-scale shingles colored and arranged to mimic a Spanish-tile roof. Two louvered tile vents in wood frames are found in the gable walls, which also features wood fascia boards. An external gutter system runs along the building's north and south elevations. Building 422 has four symmetrical, replacement sliding windows in aluminum-frames on its north elevation. The two windows located on the building's core segment replaced original garage doors that accessed the car ports. The garage's only extant entrance, which is missing a door, is a man-door on the west wing's south elevation. A multi-light window in an original wood frame is also found on Building 422's south elevation.	 Original multi-light wood-framed windows replaced with aluminum-frame sliding windows. Original garage doors replaced with aluminum-framed sliding windows Original Spanish tile roof appears to have been replaced with shingles arranged and colored to imitate Spanish tile. Gutters added to north and south elevations. Fascia boards removed from north and south elevations. 	Spanish Colonial Revival
428 Keepers' Residence	Looking northeast at the south and west elevations (IMG_0355)	c. 1939	Building 428, a Keeper's Residence, is identical to Building 416 as it was constructed for the same purpose at the same time. The residence is a two-story, Single-Family Residence composed of a basement and main floor. The building has a rectangular plan, raised foundation, and stucco cladding. The side-gable roof is moderately pitched and has shallow eaves, is clad in Spanish tiles, and has an external gutter system located on the north and south elevations. Fenestration includes a variety of aluminum-framed windows often positioned over original wood sills. The Building has two chimneys, one of which protrudes from the eastern half of the roofline, and the other that dominates the building's east elevation. The two entrances, located on the north (main) and south (rear) elevations are plain wood doors and accessed by low stoops that extend to create a porch. The porches are sheltered by pent roofs supported by square wood posts. On the south elevation, a concrete stairwell, with a metal rail, which leads to the building's basement. The basement steps and entrance are sheltered by a pent roof that protrudes from the base of the main floor.	 Original multi-light wood-framed windows replaced with aluminum-frame sliding windows. Gutters added to north and south elevations Fascia boards removed from north and south elevations. Doors replaced. 	Spanish Colonial Revival

Table 5. Survey Results: Buildings in the Built Environment Study Area

Building Number- Name	Photograph	Year Built	Descriptions	Observed Alterations	Architectural Style
448-Barracks	Looking west at the north and east elevations (IMG_0355)	c. 1944	Building 448, the Barracks and Mess Hall building, was constructed in c. 1944. The one-story building has a rectangular footprint that is constructed on a concrete crawlspace foundation. The long, narrow building has a front-gable, moderately pitched roof with shallow eaves and asphalt tile cladding. There are louvred rectangular vents in the gable-walls, located on the north (main) and south (rear) elevations, over pent roofs that are supported by circular metal posts. The roofs shelter the building's wooden doorways, which feature upper glazing in aluminum frames. Fenestration includes evenly spaced sliding windows in aluminum frames. Building 448, which has been heavily modified over time, is currently clad in stucco.	 appears the original siding, roof surfacing, and wood sash windows were removed and replaced with stucco siding, composition roofing, new woof entry doors with upper glazing, and aluminum-framed sliding windows. c. 1965, the USGS constructed an addition on the north elevation. c. 1979. the US Navy constructed a second full-width addition to the south elevation. c. 1985, an addition was constructed on the building's east elevation, creating a T-shaped floorplan. c. 1990- removed the c. 1985 wing addition and continued to update the building continuously throughout its lease. 	Spanish Colonial Revival
444-Seawater Intake System	Looking west at the south and east elevations (IMG_0267)	c. 2010	The small, shed roof building is situated north of Building 448. The rectangular building has a moderately sloped shed roof with wide eave overhangs, clad in composition shingles. The building is clad in stucco and sits on a concrete foundation.	None noted	Utilitarian

Table 5. Survey Results: Buildings in the Built Environment Study Area

Building Number- Name	Photograph	Year Built	Descriptions	Observed Alterations	Architectural Style
452- Stellar Biotechnologies Building		2019	The Stellar Biotechnologies Building was constructed in 2019. The structure sits on a concrete foundation and is constructed of metal with stretched plastic covering. The structure measures approximately 88-feet by 71-feet.	None noted None noted	Utilitarian

4.3 NRHP/CRHR Statement of Significance for the Port Hueneme Light Station (Multi-Component Site)

As prior documentation efforts have been inconclusive on the eligibility of the overall facility, Dudek evaluated the Port Hueneme Light Station as a multi-component site under NRHP and CRHR. The evaluation has been conducted in conjunction with an understanding of the relevant historic context. Dudek recommends the Port Hueneme Light Station facility as a whole does not meet the criteria under either the NRHP MPD, Light Stations of California and the NRHP MPD Light Stations in the United States, both as a multi-component site, as a stand-alone district, or as individual buildings on either the NRHP or the CRHR (Bookwalkter 1989; Clifford 2002).

Criterion A/1: That are associated with events that have made a significant contribution to the broad patterns of our history.

The Port Hueneme Light Station, which presently includes the Lighthouse and associated Keepers' Residences and accessory buildings, does not meet the registration requirements set forth in NRHP MPD, Light Stations of California or Light Stations in the United States (Bookwalkter 1989; Clifford 2002). National Register Bulletin 15 provides guidance on the evaluation of integrity related to the application of NRHP Criterion A and indicates that, "A property that is significant for its historic association is eligible if it retains the essential physical features that made up its character or appearance during the period of its association with the important event, historical pattern, or person(s) (USDOI 1995: 44)."

While the Port Hueneme Light Station has an association with the development of import-export trade in Southern California, the multi-component site does not retain integrity to convey this association. The Port Hueneme Lighthouse was recommended eligible as part of a 2013 Section 106 determination with a period of significance that includes the year the Lighthouse was constructed, 1941. None of the associated buildings were addressed in this previous documentation. As part of this project the Port Hueneme Light Station was evaluated as a multi-component site. The Port Hueneme Light Station does not retain integrity to a single period of significance individually, or as part of a grouping. Part of the minimum requirement for listing in the Light Stations of California MPD is the "existence of a functioning complex [that] implies necessary important relationships that are represented in the present day by the remaining buildings and structures of the station" (Bookwalkter 1989 F-IV). The site, as a whole, no longer retains enough integrity to convey a collective history to any period of significance. One of the most notable elements of integrity that is compromised is the integrity of setting. Significant changes to circulation patterns, introduction of new, large modern buildings, one of which, is located between the lighthouse and the Keeper's Residences, essentially separating the historic buildings on the site. Additionally, the change in use, of the Keepers' Residences, from active residential housing to vacant and/or storage space, has also greatly impacted the integrity of feeling, association, and setting of the Pre-World War II Light Station as a collective entity.

In summary, the Port Hueneme Light Station as a multi-component site does not meet the registration requirements set forth in the NRHP MPD, Light Stations of California or Light Stations in the United States under Criterion A, because the station is unable to convey its associative history with the development of import-export trade in Southern California due to a lack of overall integrity of the stie (Bookwalkter 1989; Baker 2003, Clifford 2002). Therefore, the Port Hueneme Light Station does not appear eligible under NRHP Criterion A or Criterion 1 of the CRHR.



Criterion B/2: That are associated with the lives of persons significant in our past.

To be found eligible under Criterion B the property has to be directly tied to an important person and the place where that individual conducted or produced the work for which he or she is known. Archival research did not indicate that the 1941 Port Hueneme Light Station is known to be directly related to historically significant figures at the national, state, or local level. Due to a lack of identified significant associations with important persons in history, the Port Hueneme Light Station does not appear eligible under NRHP Criterion B or Criterion 2 of the CRHR.

Criterion C/3: That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

The Port Hueneme Light Station includes a working 1941, Art Moderne Style Lighthouse, a collection of associated Spanish Colonial Revival buildings from 1939 and 1961, and several large, contemporary buildings completed after 1961. The Lighthouse retains much of its character-defining features related to the Art Moderne Style including horizontal massing, rounded bays, and smooth exterior surfaces. The associated Keepers' Residences and ancillary building are modest examples of the Spanish Colonial Revival Style. The residences feature asymmetrical façades, low-pitched roofs fitted with clay tiles, and stucco exterior walls.

The building and the immediate surroundings have undergone several large-scale alterations beginning in the 1940s that have negatively affected the site's integrity of setting, design, materials, workmanship, feeling and association. The addition of several modern era buildings (Buildings 452, 432, 404, 436, and 444), the removal of most of the landscaping surrounding the Lighthouse, and the alterations to materials, especially the extensive changes to the Keepers' Residences and associated Garages (Buildings 428, 416, 422, 406, 408, and 400) have cumulatively diminished the integrity of the site. As a collective entity under Criterion C/3 the site is unable to convey significance to a historic period. Due to the combination of additions of new buildings, the alterations to historic era buildings, and the changes to the circulation and design of the site, the property no longer is capable of conveying an association to the mid-twentieth century historic period, when the site was first developed for the purpose for which it is known. As a result of the Port Hueneme Light Station's 80-year development history, the complex displays multiple, incompatible architectural styles and does not present a unified design. Key elements related to the original site plan, landscaping, circulation patterns, massing, spatial relationships, materials, and fenestration patterns have been extensively altered resulting in the loss of the unifying design that would make the property appear as a single, cohesive complex.

Under Criterion C/3 the Port Hueneme Light Station and the buildings that comprise the overall site are not distinctive as a group of associated buildings or rise to the level to be individually significant. In addition, modifications over time have compromised this historic integrity individually and as a group to the extent that they cannot convey associative significance. Therefore, the Port Hueneme Light Station does not appear eligible under NRHP Criterion C or under Criterion 3 of the CRHR.

Criterion D/4: That have yielded, or may be likely to yield, information important in prehistory or history.

This report was limited to historical resources that are part of the built environment. Based on the research conducted for the purposes of this report, the Port of Hueneme Light Station does not appear eligible under NRHP Criterion D or Criterion 4 of the CRHR. Additional information pertaining to prehistory and archaeological resources is available in the *Phase I Archaeological Resources Report for the Port Hueneme Lighthouse Project* (Dudek 2022).



4.4 Port Hueneme Light Station (Multi-Component Site) Integrity Discussion

The Port Hueneme Light Station was analyzed as a multi-component site against the seven aspects of integrity: location, design, setting, materials, workmanship, feeling, and association. The site retains its integrity of location, as it has not been relocated. The features reflecting the original design of the Keepers' Residences and Garages have been lost due to substantial alterations. Therefore, the overall integrity of design has been diminished. The integrity of setting has been compromised due to continued development since the period of significance, 1941. The landscaping, circulation patterns, and the addition of a large modern metal clad shed between the Port Hueneme Lighthouse and the Keepers' Residences and Garages, inhibits the site from conveying a united, collective history. Therefore, the integrity of setting as a whole has been lost.

The original materials on the Lighthouse appear to be intact and therefore this building retains integrity of materials and workmanship. The remaining historic era buildings, the Keepers' Residences, Garages, and the Barracks/Mess Hall have all undergone alterations since their construction, and they have a diminished integrity of materials and workmanship. The buildings, as a multi-component site, no longer conveys its original association. Therefore, the integrity of feeling has been lost. While the Port Hueneme Light Station is associated with the development of import-export trade in Southern California, the site's overall lack of integrity, diminishes the sites ability to convey historic association. The Port Hueneme Light Station, as a multi-component site, lacks the requisite integrity to convey significance at the national, state, or local level.

4.5 Summary of Evaluation Findings

In conclusion, with the exception of the Lighthouse which retains individual eligibility on the NRHP and CRHR, the Port Hueneme Light Station do not appear eligible for listing in the NRHP, the CRHR, or at the local level. The Port Hueneme Light Station was evaluated in accordance with Section 15064.5 (a)(2–3) of the CEQA Guidelines and using the criteria outline in Section 5024.1 of the California Public Resources Code and does not appear to be a historical resource for the purposes of CEQA.

5 Impacts Analysis

This Section provides a project impact analysis for the Port of Hueneme Lighthouse that is identified as a CEQA historical resource as part of this study. As described in the Project Description (Section 1.2), the proposed project would demolish seven (7) buildings, as well as remove landscaping and support structures on an approximately 2-acre area (see Figure 2, Project Site). All buildings proposed for demolition are not considered historical resources for the purposes of CEQA. The following sections provide impacts analysis of all proposed project activities that may result in significant impacts to built environment CEQA historical resources.

CEQA requires a lead agency to determine whether a project may have a significant effect on historical resources (PRC Section 21084.1; CEQA Guidelines section 15064.5[b]). The significance criteria used to evaluate the impacts of the proposed project to cultural resources are based on Appendix G of the CEQA Guidelines, as listed below. A significant impact would occur if the proposed project would:

- 1. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5.
- 2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.
- 3. Disturb any human remains, including those interred outside of dedicated cemeteries.
- 4. 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:
 - a. 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).
 - 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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

CEQA uses the following levels of significance to evaluate impacts to historic resources:

- i. Significant and Unavoidable Impact: The impact exceeds the defined standards of Significance and cannot be eliminated or reduced to a less than significant level through the implementation of potentially feasible mitigation measures.
- ii. **Significant Impact:** Impacts that exceed the defined standards of significance and that can be eliminated or reduced to a less than significant level through the implementation of potentially feasible mitigation measures.
- iii. **Potentially Significant Impact**: Impacts where there is uncertainty regarding whether they exceed the defined standards of significance. Mitigation is recommended to avoid potential impacts.
- iv. **Less Than Significant Impact**: The effect of the proposed project is less than significant, and no mitigation is necessary to reduce the impact to cultural resources.
- v. **No Impact:** the effect does not apply to the project or it clearly will not impact or be impacted by the project.

5.1 Project Design Summary

The proposed project would demolish existing buildings that can no longer be used and are in a derelict state, in a location that removal of these buildings would allow for use as open backlands for ongoing Port operations now, and ostensibly future aquaculture operations. The proposed project would demolish a total of approximately 37,500 square feet of developed impervious areas, including (7) seven buildings in the study area. The proposed disturbance footprint is anticipated to be approximately 1.7 acres and an area of approximately 1.5 acres would be graded and paved after demolition.

5.2 Methodology

The effort to identify built environment cultural resources within and adjacent to the project site included a review of a CHRIS records search, an intensive level survey by qualified architectural historians, building development and archival research, and development of an appropriate historic context. The multi-component Port Hueneme Light Station has been found to not be historically significant under any applicable criteria and does not require consideration under CEQA. The following analysis is limited to the Port Hueneme Lighthouse which qualifies as a CEQA historical resource Criterion A for its association with the development of import-export trade in Southern California, and under Criterion C, for its distinctive Art Moderne style. The Lighthouse is the only known Art Moderne styled lighthouse in the State of California.

5.2.1 Impact Analysis of the Port Hueneme Lighthouse

Impact CUL-1 The project may cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5.

The following analysis addresses potential impacts to the CEQA historical resource located in the study area, the Port Hueneme Lighthouse. According to CEQA (section 21084.1), a project that could "cause a substantial adverse change in the significance of an historical resource" may have a significant impact. CEQA Guidelines section 15064.5(b)(1) indicates that a "substantial adverse change in the significance of an historical resource" means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired." Subsection (2) further indicates that the significance of a historical resource is materially impaired when a project "demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance" that justify its inclusion in or eligibility for listing in the CRHR or its inclusion in a local register.

Current professional practice under CEQA commonly groups activities that could cause such impacts into direct and indirect impact considerations. Direct impact considerations are commonly linked to physical project construction activities that might result in direct disturbance of a historical resource and/or damage or demolition, non-compatible additions/structural modifications, and construction related ground borne vibration. Impact considerations commonly considered indirect are largely related to potential post-construction impacts of a project that is near a historical resource, such as noise, shadow, or visual effects, depending on the circumstances.

The character defining features of a historic resource are those physical attributes that help it is convey its associative significance. The Character Defining Features under NRHP Criterion A/CRHR Criterion 1 are limited to maintaining its original location, setting, and its continued use as a lighthouse. The character defining features associated with the Port

Hueneme Lighthouse, under NRHP Criterion C/CRHR Criterion 3, are limited to its ability to exhibit historic Art Moderne design details as follows:

Maintains the features of its Art Moderne design:

- Smooth wall surfaces
- Multi-light windows
- Flat roofs
- horizontal bands of windows
- smooth walls with no ornamentation



Exhibit 7. View looking south at the north elevation of the Port Hueneme Lighthouse, and surrounding fencing (historic property boundary) (Building 440).

The Port Hueneme Lighthouse historic property boundary is defined as the fenced area which includes the Lighthouse and its related features. This boundary encompasses the CEQA historical resource (Exhibit 7). As described in the Project Description (Section 1.2), the proposed project includes the demolition of (7) seven buildings adjacent to the Port Hueneme Lighthouse. The redevelopment plans include demolition and renovation of softscape and hardscape landscape elements within the project site. There are no CEQA historical resources located within the project site. The historic property boundary for the Port Hueneme Lighthouse, located adjacent to the project site, is limited to the footprint of the building and its surrounding fence line.

The proposed project would not demolish, destroy, or relocate the Port Hueneme Lighthouse and would not diminish the integrity of property's significant historic features including its original design. Project activities are limited to demolition of buildings within the proposed project site. The Lighthouse will not be damaged by this demolition as it is more than approximately 150 feet from the historic property boundary of the resource. Furthermore, project implementation will not obstruct or detract from views of the Lighthouse. All of the character defining features of the historical resource will remain intact. The Lighthouse will remain in its historic location, and setting, and it will continue to serve its intended function, such that it will continue to convey its significance under NRHP Criterion A and CRHR Criterion 1.

The modifications to the site will not introduce any new incompatible elements that would diminish the integrity of the Port Hueneme Lighthouse or change the design of the Lighthouse, such that the Lighthouse will continue to convey its significance under NRHP Criterion C and CRHR Criterion 3. Therefore, the proposed project would result in a less-than-significant impact on historical resources, no mitigation required.

6 Findings and Conclusions

Based on Dudek's research, field survey, and property significance evaluation described in this report, this section presents a summary of findings and management recommendations for the proposed project.

6.1 Summary of Findings

As stated above, the multi-component Port Hueneme Light Station located in the study area was evaluated for listing in the NRHP and the CRHR and was found ineligible under all criteria. While the associated buildings were found to lack integrity, the Port Hueneme Lighthouse was determined eligible in 2013 following consultation with SHPO and presently maintains a CRHR status code of 2S2 (Individually determined eligible for NR by consensus through Section 106 process. Listed in the CR). The period of significance was identified as 1941, the year of the Lighthouse's construction.

With the exception of the Port Hueneme Lighthouse, the buildings comprising the Port Hueneme Light Station, including the (7) seven buildings proposed for demolition, do not appear to be historical resources under CEQA. The recommended CRHR Status Code for the buildings in the Built Environment Study Area is presented below in Table 6, Summary of Findings and in Figure 4, Eligibility Findings.

Table 6. Summary of Findings

USCG Building Number	Building Name	Year Built	Eligibility Status/Applicable Criteria	CRHR Status Code	CEQA Finding
416	Keepers' Residence	c. 1939	N/A	6Z	No Impact to Historical Resources
422	Garage-1 associated with buildings 416 and 428	c. 1939	N/A	6Z	No Impact to Historical Resources
428	Keepers' Residence-1	c. 1939	N/A	6Z	No Impact to Historical Resources
440	Lighthouse	1941	NRHP Criterion C/CRHR Criterion 3	2\$2	Less Than Significant Impact. No Mitigation Required.
448	Barracks/Mess Hall	c. 1943	N/A	6Z	No Impact to Historical Resources
400	Keepers' Residence	1961	N/A	6Z	No Impact to Historical Resources
406	Garage associated with buildings 400 and 408	1961	N/A	6Z	No Impact to Historical Resources
408	Keepers' Residence	1961	N/A	6Z	No Impact to Historical Resources
404	Building 404	c. 1978	N/A	6Z	No Impact to Historical Resources

432	Shed	c. 1985	N/A	6Z	No Impact to Historical Resources
444	Seawater Intake System	c. 2010	N/A	6Z	No Impact to Historical Resources
452	Stellar Biotechnologies Building	2019	N/A	6Z	No Impact to Historical Resources

Status Codes: 2S2 = Individually determined eligible for NRHP by consensus through Section 106 process, Listed in the CRHR.; 6Z = Found ineligible for the NRHP, CRHR, or local designation through survey evaluation.

As the buildings associated with the Port Hueneme Light Station lack integrity and do not appear to be eligible for the NRHP or the CRHR, their demolition will not have a less than significant impact on the adjacent NRHP/CRHR eligible Lighthouse. The Lighthouse is individually eligible for Criterion C/3 and the associated buildings do not improve to the Lighthouse's ability to convey its historic period of significance. No further work for built environment cultural resources is necessary prior to the proposed project implementation. The proposed improvements would not adversely impact the physical characteristics that convey the historical significance of the Port Hueneme Lighthouse, as none of the improvements would alter the overall historic integrity of this resource. Therefore, the proposed project would result in a **less-than-significant impact** on historical resources and no mitigation is required.



SOURCE: Sanborn 2020

Summary of Eligibility Findings

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7 References

- Baker, Cindy L. and J. Dougherty. 2003. Port Hueneme Lighthouse. National Register of Historic Places Nomination Form. Par Environmental. October 16, 2003.
- Bakic. 2003. DPR 523 form set for the Port Hueneme Light Station. PAR Environmental Services Inc.
- Bookwalter, Jack. 1989. Historic Lighthouses of California. Multiple Property Document. National Parks Service.

 United States Department of the Interior.
- Clifford. 2002. National Register of Historic Places Multiple Property Documentation Form: Light Stations in the United States.
- Google Earth Pro. 2022. Aerial View of the Port Hueneme, CA. Accessed June 29, 2022. https://www.google.com/maps/place/Port+Hueneme,+CA/@34.159363,-119.203741,14z/data=!3m1!4b1!4m5!3m4!1s0x80e84b007fdaca29:0x48333ac255857a54!8m2!3d34.1477829!4d-119.1951074
- McPherson. 2012. Letter Report on the Decommissioning of the Fresnel Lens at Point Hueneme Lighthouse (Report No. VN-03124)
- McAlester, Virginia. 2018. A Field Guide to American Houses. New York: Alfred A. Knopf.
- National Archives. c. 1941. Photograph 205582837. https://catalog.archives.gov/id/205582837. Accessed June 20, 2022.
- NETR. 2022. "Historic Aerials Online." Historic Aerial Photographs of the Port Hueneme Light Station, Port Hueneme, CA dating from 1947, 1967, 1984, 1985, 1994, 2005, 2009, 2010, 2012, 2014, 2016, 2018. Accessed June 3, 2022. Available at: https://www.historicaerials.com/viewer.
- National Archives. c. 1941. Photograph 205582837. https://catalog.archives.gov/id/205582837. Accessed June 20, 2022.
- NPS (National Park Service). 1997. How to Apply the National Register Criteria for Evaluation. National Register Bulleting 15. Published 1990; last revised 1997. https://www.nps.gov/subjects/nationalregister/publications.htm.
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- Roland-Nawi, Carol. 2013. Section 110 Consultation for National Register of Historic Places Eligibility

 Determination for Port Hueneme Light, Ventura County. Letter from the State Historic Preservation Officer to E.F. Wandelt. On file with the California OHP: SHPO reference number USCG_2013_0520_0001

- UCSB. 2022. Historic Aerial Photographs of the Port Hueneme Light Station, Port Hueneme, CA dating from 1945, 1975 and 1982. University of California, Santa Barbara. Map & Imagery Laboratory (MIL) UCSB Library, Electronic Resource, http://mil.library.ucsb.edu/ap_indexes/FrameFinder. Accessed June 12, 2022.
- USDOI (US Department of the Interior). 1995. "National Register Bulletin: How to Apply the National Register Criteria for Evaluation." National Park Service: Accessed May 23, 2022. https://www.nps.gov/subjects/nationalregister/upload/NRB-15_web508.pdf

Ventura County Cultural Heritage Board Staff. 2019. Ventura County Historical Landmarks and Points of Interest.



Appendix ADPR 523 Forms

Port Hueneme Lighthouse DPR 523 Update Port Hueneme Light Station DPR 523 Form Set State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary# P-56-152840

HRI#

Trinomial

NRHP Status Code 2S2

	Other Listings			
	Review Code	Reviewer	Date	
*Recorded by:	Adrienne Donovan-Boyd, MS, Dudek	*Date: 06/29/2022	☐ Continuation ■U	Ipdate

P1. Other Identifier: U.S. Coast Guard Building 440

*P2. Location: ☐ Not for Publication ■ Unrestricted

- *a. County Ventura and (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
- *b. USGS 7.5' Quad Oxnard Date 1949; photo revised 1967 T 01N; R 22W; San Bernardino B.M.
- c. Address No Legal Situs City Port Hueneme Zip 93044
- d. UTM: (Give more than one for large and/or linear resources) Zone 11 , 296244 mE/ 3780433 mN

Page 1 of 3 *Resource Name or #: (Assigned by recorder) Port Hueneme Lighthouse

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate) Ventura County Assessor Parcel Number (APN): 206-0-020-340

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The purpose of this update is to provide an updated record of the Port Hueneme Lighthouse (Lighthouse) since it was last recorded in 2003. This update includes a summary of the evaluation status of the property to date and a current description and conditions assessment of the property. *See Continuation Sheet

*P3b. Resource Attributes: (List attributes and codes) HP24. Lighthouse; HP34. Military property (historic use)

*P4.Resources Present: ■ Building □ Structure □ Object □ Site □ District □ Element of District □ Other (Isolates, etc.)

P5b. Description of Photo: (view, date, accession #) Photograph 1: View looking south at the north elevation of the Port Hueneme Lighthouse (01/04/2022, IMG 0250)



*P6. Date Constructed/Age and Source:

■ Historic □ Prehistoric □ Both 1941 (Baker and Dougherty 2003)

*P7. Owner and Address:

The Port of Hueneme Oxnard
Harbor District
3033 Ponoma Street
Port Hueneme, CA. 93041

*P8. Recorded by: (Name, affiliation, and address) Andrew Bursan, MCRP

Dudek
38 North Marengo Avenue
Pasadena, CA 91101

P9. Date Recorded: 01/04/2022

*P10. Survey Type: (Describe)
Intensive

*P11. Report Citation: (Cite survey report and other sources or enter

"none.") Dudek. 2022. "Built

Environment Inventory and Evaluation Report Port of Hueneme Lighthouse Project, Hueneme California." Prepared for the Port of Hueneme Oxnard Harbor District, July 2022.

*Attachments: □ NONE □ Location Map ■ Continuation Sheet □ Building, Structure, and Object Record □Archaeological Record □District Record □Linear Feature Record □Milling Station Record □Rock Art Record □Artifact Record □Photograph Record □ Other (List):

DPR 523A (9/2013) *Required information

State of California - The Resources Agency DEPARTMENT OF PARKS AND RECREATION

Primary# HRI # Trinomial

CONTINUATION SHEET

Property Name: Port Hueneme Lighthouse

Page 2 of 3

*P3a. Description (Continued):

The current physical condition of the Lighthouse is good and it continues to function in its original capacity as a lighthouse.

The Lighthouse exhibits an Art Moderne architectural style with a rectangular plan that is constructed on a concrete slab foundation. The attached one-story Fog Station is supported by a concrete perimeter wall foundation and large, chamfered support footings and pillars. The parapeted roof over the single-store fog station is flat reinforced concrete supported from the interior with steel I-beam ceiling joists and crossbeams.

The Lighthouse's forty-eight-foot-tall square tower extends from the center of the Fog Station's north (main) elevation. The Lighthouse tower also has chamfered support columns, that include a pedestal and tiered finial, positioned at each corner. The Lighthouse tower is topped with a concrete slab that is supported from the interior with steel I-beam ceiling joists and crossbeams. The second and third levels of the Lighthouse retain their original concrete floors and an original quarter-spiral steel ladder with checkered floor plate treads leads to the lantern room. The lantern room walls are constructed of steel, including a crisscross sash located around the upper half of the room. The arched, glazed, steel door provides access to the observation deck, which is guarded by metal railings. The lantern room's roof, a steel conical roof, is topped with a pointed finial and metal ball. The roof serves a heat dispersing vent.

The fenestration, except for one window, includes original multi-paned metal sash windows. The window directly above the entrance was altered in 1990 to feature a single pane fixed window with "Point Hueneme Lighthouse/Established 1874/Current Lens Installed 1874/Present Tower Built in 1990" painted onto it. Above the fixed window is a bronze USCG plaque. The single entrance, located in the center of the building's north (main) elevation is an aluminum-framed glass door flanked by two narrow, vertical sidelights. The exterior elevations of the Lighthouse and fog station are clad in stucco.

Observed Alterations

- The original entrance was altered from a paneled wood double door to an aluminum-framed glass door flanked by two narrow, vertical sidelights.
- A type "F" diaphone and steel latter affixed to the south (rear) elevation of the building and a steel ladder on the west elevation were removed.
- The original rail that guarded the observation deck was replaced.
- The original Lighthouse's lens has been removed

*B10. Significance

Significance Summary:

In 2003, the Lighthouse was evaluated and found eligible for individual listing in the NRHP under the National Register of Historic Properties (NRHP) Multiple Property Documentation (MPD) form for Light Stations of the United States and NRHP MPD form for Light Stations of California under Criterion A for its association with the development of import-export trade in Southern California, and under Criterion C as the only example of an Art Moderne-style lighthouse in California. In addition to the Lighthouse, the nomination also addressed the two c. 1939 keeper's quarters originally associated with the Lighthouse and concludes that due to a loss of integrity of setting and feeling, they do not appear eligible for listing on the NRHP (C. Baker and J. Dougherty 2003). Additionally, the Port Hueneme Lighthouse was determined eligible following consultation with SHPO (USCG_2013_0520_001) in June 2013 and presently maintains a California Historic Resource Status (CHRS) code in the Built Environment Resource Directory (BERD) of 2S2 (Individually determined eligible for NRHP by consensus through Section 106 process, Listed in the CRHR). Dudek agrees with the 2003 NRHP evaluation findings that the Lighthouse appears individually eligible for listing

DPR 523L (9/2013) *Required information

State of California - The Resources Agency DEPARTMENT OF PARKS AND RECREATION

Primary# HRI # Trinomial

CONTINUATION SHEET

Property Name: Port Hueneme Lighthouse

Page __3 **of** __3

under the NRHP MPD, Light Stations of California and the NRHP MPD, Light Stations in the United States. For this reason, the Port Hueneme Lighthouse is considered an eligible CEQA historical resource.

Historic Property Boundary:

The historic property boundary for the defined as the fenced area which includes the Lighthouse and its related features.

*B12. References (Continued):

- Baker, Cindy L. and J. Dougherty. 2003. Port Hueneme Lighthouse. National Register of Historic Places Nomination Form. Par Environmental. October 16, 2003.
- Bakic. 2003. DPR 523 form set for the Port Hueneme Light Station. PAR Environmental Services Inc.
- Bookwalter, Jack. 1989. Historic Lighthouses of California. Multiple Property Document. National Parks Service. United States Department of the Interior.
- Clifford. 2002. National Register of Historic Places Multiple Property Documentation Form: Light Stations in the United States.

DPR 523L (9/2013) *Required information

State of California - The Resources Agency DEPARTMENT OF PARKS AND RECREATION	Primary # HRI #		
PRIMARY RECORD	Trinomial NRHP Status Co	ode <u>6Z</u>	
Other Listings			
Review Code	Reviewer	Date	
Page 1 of 35 *Resource Name or #: (Assig	ned by recorder)	Port Hueneme Light Station	
P1. Other Identifier: Port Hueneme Light Station			
*P2. Location: ☐ Not for Publication ■ Un	restricted		
*b. USGS 7.5' Quad Oxnard Date 1949; photoc. c. Address No Legal Situs City Port Human Date 1949; photocompositions of the Locational Data: (e.g., parcel #, directions Ventura County Assessor Parcel Number (APN): *P3a. Description: (Describe resource and its major setting, and boundaries) Overview of the Site: The Port Hueneme Lighteneme harbor entrance in Ventura County, Coun	o revised 1967 T 0 eneme Zip 93044 ar resources) Zone 13 to resource, elevation 206-0-020-340 elements. Include that Station is 10 California (Photo	design, materials, condition, alterations, size ocated on the south side of the Porpagraph 1). *See continuation sheet.	
*P3b. Resource Attributes: (List attributes and codes property; HP4. Ancillary Building; HP11. Eng: Property			
*P4.Resources Present: ■ Building □ Structure □ Objective *P5b. Description of Photo: Photograph 1: Overv	riew of the Port I	Hueneme Light Station, looking	
southwest. From left to right is the modern of Lighthouse (Building 440), Building 452, and			_
*P6. Date Constructed / Source: ■Historic □ Prehistoric		-	



The Port of Hueneme Oxnard Harbor District 3033 Ponoma Street Port Hueneme, CA. 93041

*P8. Recorded by: (Name, affiliation, and address) Andrew Bursan, MCRP Dudek 38 North Marengo Avenue Pasadena, CA 91101

*P9. Date Recorded: January 4, 2022

Survey Type: (Describe) Intensive *P10.

*P11. Report Citation: (Cite survey report and other sources, or enter "none.")

Dudek. 2022. "Built Environment Inventory and Evaluation Report Port of Hueneme Lighthouse Project, Hueneme California." Prepared for the Port of Hueneme Oxnard Harbor District. Prepared July 2022.

*Attachments: ⊔ľ	NONE	Location Map	Continuatio	n Sheet	Building, Structure, and	Object Record	
□Archaeological F	Record	□District Record	□Linear Featur	re Record	□Milling Station Record	□Rock Art Record	
☐Artifact Record	□Phote	ograph Record	□ Other (List):				

DPR 523A (9/2013) *Required information

	of California - The Resources Agency Primary #
BUILDING, STRUCTURE, AND OBJECT RECORD	
Page *B1. *B2. *B3. *B5. *B6.	urce Name or # (Assigned by recorder) Port Hueneme Light Station *NRHP Status Code 62 2 of 35 Historic Name: Port Hueneme Light Station Common Name: Port Hueneme Oxnard Harbor District Original Use: Light Station *B4. Present Use: Light Station Architectural Style: Art Moderne; Spanish Colonial Revival; Utilitarian Construction History: (Construction date, alterations, and date of alterations)
	Moved? ■No □Yes □Unknown Date: Original Location: Related Features: N/A
	Architect: United States Coast Guard, 11th District b. Builder: United States Coast Guard, 11th District Significance: Theme N/A Area N/A Period of Significance Property Type Applicable Criteria None (Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)
and winteg SHPO by coident	multi-component Port Hueneme Light Station was evaluated for listing in the NRHP and the CRHR was found ineligible under all criteria. While the associated buildings were found to lack grity, the Port Hueneme Lighthouse was determined eligible in 2013 following consultation with and presently maintains a CRHR status code of 2S2 (Individually determined eligible for NR consensus through Section 106 process. Listed in the CR). The period of significance was crified as 1941, the year of the Lighthouse's construction.
	the exception of the Port Hueneme Lighthouse, the buildings comprising the Port Hueneme Light on do not appear to be historical resources under CEQA.
* See	Continuation Sheet
B11. *B12 .	Additional Resource Attributes: (List attributes and codes) None. References:
* See	Continuation Sheet
B13.	Remarks:
	Evaluator: Adrienne Donavan-Boyd, Dudek of Evaluation: July 13, 2022 See Enlarged Sketch Map on Page 4
(This	space reserved for official comments.)

DPR 523B (9/2013) *Required information

LOCATION MAP

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*Map Name: Port Hueneme, California *Scale: 1:24,000 *Date of map: 2022



State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

SKETCH MAP

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*Drawn By: Kirsten Zecher, Dudek *Date of map: __2022_

Port Hueneme Light Station Boundary Building Footprints 416 - Keepers' Residence (c.1939) 422 - Garage-1 associated with buildings 416 and 428 (c.1939) 428 - Keepers' Residence-1 (c.1939) 440 - Lighthouse (1941) 448 - Barracks/Mess Hall (c.1943) 400 - Keepers' Residence (1961) 406 - Garage associated with buildings 400 and 408 (1961) 408 - Keepers' Residence (1961) 404 - Building 404 (c.1978) 432 - Shed (c.1985) 444 - Seawater Intake System (c.2010) 452 - Stellar Biotechnologies Building (2019) 400 432 Lighthouse Promenade

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*P3a. Description (Continued):

The historic era buildings that remain on the site include the following:

- Lighthouse, Building 440, 1941
- Keeper's Residence, Building 416, c. 1939
- Garage, Building 422, c. 1939
- Keepers' Residence, Building 428, c. 1939
- Barracks/Mess Hall, Building 448, c. 1943
- Keepers' Residence, Building 400, 1961
- Garage, Building 406, 1961
- Keepers' Residence, Building 408, 1961

Four buildings constructed after 1977 including:

- Building 404 (c. 1978)
- Building 432 (c. 1985)
- Building 444 (c. 2010)
- Building 452 (2019)

The Port Hueneme Light Station is divided into several distinct areas. Historically, a maintained, concrete, walkway connected the buildings. Today, the walkways are unmaintained and deteriorated (Photograph 2). The Lighthouse (Building 440), located between two modern buildings at the southern end of the site, is the Station's most distinctive building (Photograph 3). The Art Moderne-style Lighthouse (Building 440) sits with the primary façade facing north in a paved area on the southern portion of the study area. To the west is the Stellar Biotechnologies Building (Building 452), a modern barrel roof structure. To the east of the Lighthouse (Building 440), is a modern, metal-clad storage shed (Building 432), the Barracks/Mess Hall (Building 448), and the Seawater Intake System (Building 444) (Photograph 4). The Barracks/Mess Hall (Building 448) is the only historic era building to the west of the Lighthouse and was constructed in c. 1943. The building has been heavily altered since its construction. East of the Lighthouse (Building 440) and the Shed (Building 432) is a collection of three buildings set in a triangle formation. These buildings represent the oldest buildings on the site, predating the 1941 Lighthouse by approximately one year. The collection consists of three buildings constructed in c. 1939, Building 406, which was originally a garage, and two associated Keepers' Residences (Buildings 428 and 416) (Photograph 5). Buildings 408, 400, and 406 were constructed in 1961 and are located to the west of the c. 1939 grouping (Photograph 6). These buildings are arranged in a similar triangular fashion as the c. 1939 grouping. Building 406 was historically a two-car garage associated with the two 1961 Keepers' Residences (Buildings 408 and 400) (Photograph 7). Building 404, constructed to the south of Buildings 408 and 400, was constructed in c. 1978 (see Photograph 6).

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Photograph 2. View looking southeast at the Lighthouse (Building 440), the Keepers' Residences
(Building 416, 428) and garage (Building 422) (National Archives #205582837: c. 1941).

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Photograph 2. View looking southeast at the Keeper's Residence (Building 428) and c. 1985 Shed (Building 432) (IMG 0498).



Photograph 3. View looking east at the Keeper's Residence (Building 416), (408), and modern era multi-use building, Building 404 (IMG_0500).

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Photograph 4. View looking north at the Keeper's Residence (Building 408) and c. 1978 Building 404 (IMG 0477)



Photograph 5. View looking east at Building 406 (left), Building 400 (center) and Building 408 (center). Modern developments are visible east of the project area in background (IMG 0478)

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Port Hueneme Light Station Elements

The Port Hueneme Light Station has eight historic era buildings spread across the southwestern point of the peninsula. The site includes the Lighthouse (Building 440: 1941), two Keeper's Residences (Buildings 428 and 416: c. 1939), two Keeper's Residences (Buildings 408 and 400: 1961), two buildings that were historically Garages (Building 422: c. 1939 and Building 406: 1961), a former USCG Barracks/Mess Hall (Building 448: c. 1941), a contemporary shed (Building 432: c. 1985), a contemporary mixed-use building (Building 404: c. 1978). Table 5 below includes brief current descriptions of each of these elements.

Building Description

Photograph

440-Lighthouse

Year Built: 1941

Architectural Style: Art Moderne

Description: The Port Hueneme Lighthouse and Fog Station Photographs an Art Moderne architectural style with a rectangular plan that is constructed on a concrete slab foundation. The attached one-story Fog Station is supported by a concrete perimeter wall foundation and large, chamfered support footings and pillars. The parapeted roof over the single-store fog station is flat reinforced concrete supported from the interior with steel I-beam ceiling joists and crossbeams.

The Lighthouse's forty-eight-foot-tall square tower extends from the center of the Fog Station's north (main) elevation. The Lighthouse tower also has chamfered support columns, that include a pedestal and tiered finial, positioned at each corner. The Lighthouse tower is topped with a concrete slab that is supported from the interior with steel I-beam ceiling joists and crossbeams. The second and third levels of the Lighthouse retain their original concrete floors and an original quarterspiral steel ladder with checkered floor plate treads leads to the lantern room. The lantern room walls are constructed of steel, including a crisscross sash located around the upper half of the room. The arched, glazed, steel door provides access to the observation deck, which is guarded by metal railings. The lantern room's roof, a steel conical roof, is topped with a pointed finial and metal ball. The roof serves a heat dispersing vent.

Building 440's fenestration, except for one window, have original multi-paned



Looking southwest at the north and east elevations



(IMG_0264) Looking south at the north elevations (IMG_0266)

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Building Description	Photograph
metal sash windows. The window directly above the entrance was altered in 1990 to feature a single pane fixed window with "Point Hueneme Lighthouse/Established 1874/Current Lens Installed 1874/Present Tower Built in 1990" painted onto it. Above the fixed window is a bronze USCG plaque. The single entrance, located in the center of the building's north (main) elevation is an aluminum-framed glass door flanked by two narrow, vertical sidelights. The exterior elevations of the Lighthouse and fog station are clad in stucco.	
Observed Alternations: The original entrance was altered from a paneled wood double door to an aluminum-framed glass door flanked by two narrow, vertical sidelights. A type "F" diaphone and steel latter affixed to the south (rear) elevation of the building and a steel ladder on the west elevation were removed. The original rail that guarded the observation deck was replaced. The original Lighthouse's lens has been removed	

Year Built: c. 1985

Architectural Style: No Discernible Style

Description: Building 432 is a rectangular-shaped, prefabricated, two-story building clad in raised-seam metal. Three mechanical vent units line the building's ridgeline. The building has limited windows that are comprised of aluminum-framed sliders. A corrugated metal roof supported by wood boards projects from the building's east elevation.

Observed Alternations:

Wood-frame, corrugated metal shelter added to building's east elevation.

432-Shed



Looking southwest at the north and east elevations (IMG 0277) $\,$

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400- Keepers' Residence

Year Built: c. 1961

Architectural Style: Spanish Colonial

Revival

Description: Building 400 is a cross-gable L-shaped building that features an intersecting gable-roofed wing that projects from the western side of the south elevation to form a shallow porch. The building's roof is medium pitched, has shallow, overhanging eaves, and is clad in Spanish tile. The porch roof is supported by square wood posts. Triangular slatted attic vents are located in the peaks of the gable ends and fascia boards line each elevation.

Exterior gutter systems are located along the north and south elevations. The building's fenestration is currently covered in wood boards and are not visible. Entrances are comprised of plain wood doors. A chimney protrudes from the building's roofline. An ornate two-arch wash basin is attached to the south elevation of Building 400.

Observed Alternations:

- Gutters added to north and south elevations.
- Original doors replaced.
- Windows boarded up
- Paved area added to north of residence.



Looking southwest at the north and east elevations (IMG 0452)

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404- Building 404

Year Built: c. 1978

Architectural Style: Post Modern

Description: Building 404 is a two-story building with a largely rectangular plan that features a saltbox styled roofline. The northern facing moderately sloped roof shelter's the second story and there is a single-story, pent roof projection also extending from the building's north elevation. The southfacing roof slopes dramatically to the first story before the west side of the roof extends over a shallow porch while the western half terminates at the elevation's edge. Rafters continue past the roof's point of termination and end at the shallow porch. Shallow pent roofs also extend from the building's west elevation to shelters a centered double door entrance way, which has been infilled with vertical wood boards, and a wood man-door with a fixed top-center window. The building's fenestration is comprised of aluminum-framed sliding windows. Building 404's elevations are clad in vertically scored T1-11 plywood panels and the roof is clad in fishscale shingles colored and arranged to mimic a Spanish-tile roof.

Observed Alternations:

- Original windows replaced.
- Original roof appears to have been replaced.

Doors infilled or replaced.



Looking northeast at the west and south elevations (IMG 0437)

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Year Built: c. 1961

Architectural Style: Spanish Colonial

Revival

Description: Building 406, a two-car garage, is a stucco-clad one-story building constructed on a rectangular slab foundation. The building's moderately pitched side-gable roof has a cascading-gable effect created by two wings that extend from the core segment's east and west elevations. The roof is clad in fish-scale shingles colored and arranged to mimic a Spanishtile roof. Two louvered, rectangular vents are in the gable walls. All elevations feature wood fascia boards. An external gutter system runs along the building's north and south elevations. The building has replacement aluminumframed casement windows. The north (main elevation) of Building 406 features two garage doors. The eastern garage door has two symmetrical fixed windows protected by wire mesh. The windows on the west garage doors have been covered with fabric and are not visible. The building's east and west elevations feature a single, centered, multi-light, aluminum-frame casement window. Building 406's south (rear) elevation has two symmetrical windows on the building's main core. The building's wings feature wood-panel man doors in wood frames.

Observed Alternations:

- Original multi-light wood-framed windows replaced with aluminum-frame sliding windows.
- Original Spanish tile roof appears to have been replaced with shingles arranged and colored to imitate Spanish tile.
- Gutters added to north and south elevations.
- Fascia boards removed from north and south elevations.
- Pedestrian doors on rear elevations replaced.

406-Garage



Looking south at the north elevations (IMG 0385)

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408- Keepers' Residence

Year Built: c. 1961

Architectural Style: Spanish Colonial

Revival

Description: Building 408, a Keepers' Residence, is a two-story, Single-Family Residence with a rectangular plan, raised foundation, and stucco cladding. The cross-gable roof is moderately pitched and has shallow eaves, is clad in Spanish tiles, and has an external gutter system that stretches across the north (rear) elevation and extends the east portion of the south (main) elevation. Louvered, rectangular vents are located in the gable walls. A brick chimney protrudes from the center of the roof's ridgeline. A protruding front facing gable located on the west side of the south (main) elevation shelters two multi-light casement windows and the primary entrance, a plain wood door, on the west half of the south elevation is a set of paired aluminum frame casement windows. The label "1304" is stenciled on the south elevation.



Looking north at the south elevation (IMG $_0452$)

Observed Alternations:

• Decorative shutters removed

416 Keepers' Residence

Year Built: c. 1939

Architectural Style: Spanish Colonial

Revival

Description: Building 416, a Keepers' Residence, is identical to Building as it was constructed for the same purpose at the same time. The residence is a two-story, Single-Family Residence comprised of a basement and main floor. The building has a rectangular plan, raised foundation, and stucco cladding. The side-gable roof is moderately pitched and has shallow eaves, is clad in Spanish tiles, and has an external gutter system located on the north and south elevations. The building's fenestration includes a variety of aluminum-framed windows often positioned over original wood sills. Building 416 has two chimneys, one of which protrudes from the eastern half of the roofline, and the other that dominates the building's east elevation. The two entrances, located on the north (main)



Looking northeast at the south and west elevations (IMG 0355)

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and south (rear) elevations are plain wood doors and accessed by low stoops that extend to create a porch. The porches are sheltered by pent roofs supported by square wood posts. On the south elevation, a concrete stairwell, with a metal rail, which leads to the building's basement. The basement steps and entrance is sheltered by a pent roof that protrudes from the base of the main floor.

Observed Alternations:

- Original multi-light wood-framed windows replaced with aluminum-frame sliding windows.
- Gutters added to north and south elevations.

Fascia boards removed from north and south elevations.

Year Built: c. 1939

Architectural Style: Spanish Colonial Revival

Description: Building 422, originally a two-car garage, is a stucco-clad onestory building constructed on a rectangular slab foundation. The east elevation has "1307" painted on the building, suggesting this was an earlier used building number. The building's moderately pitched side-gable roof has a cascading-gable effect created by two wings that extend from the core segment's east and west elevations. The roof is clad in fish-scale shingles colored and arranged to mimic a Spanishtile roof. Two louvered tile vents in wood frames are found in the gable walls, which also features wood fascia boards. An external gutter system runs along the building's north and south elevations. Building 422 has four symmetrical, replacement sliding windows in aluminum-frames on its north elevation. The two windows located on the building's core segment replaced original garage doors that accessed the car ports. The garage's only extant entrance, which is missing a door, is a man-door on the west wing's south elevation. A multi-light window in an original wood frame is also found on Building 422's south elevation.

Observed Alternations:

422 Garage



Looking southwest at the north and east elevations (IMG 0295)

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- Original multi-light wood-framed windows replaced with aluminum-frame sliding windows.
- Original garage doors replaced with aluminum-framed sliding windows
- Original Spanish tile roof appears to have been replaced with shingles arranged and colored to imitate Spanish tile.
- Gutters added to north and south elevations.
- Fascia boards removed from north and south elevations.

428 Keepers' Residence

Year Built: c. 1939

Architectural Style: Spanish Colonial Revival

Description: Building 428, a Keepers' Residence, is identical to Building 416 as it was constructed for the same purpose at the same time. The residence is a two-story, Single-Family Residence composed of a basement and main floor. The building has a rectangular plan, raised foundation, and stucco cladding. The side-gable roof is moderately pitched and has shallow eaves, is clad in Spanish tiles, and has an external gutter system located on the north and south elevations. Fenestration includes a variety of aluminum-framed windows often positioned over original wood sills. The Building has two chimneys, one of which protrudes from the eastern half of the roofline, and the other that dominates the building's east elevation. The two entrances, located on the north (main) and south (rear) elevations are plain wood doors and accessed by low stoops that extend to create a porch. The porches are sheltered by pent roofs supported by square wood posts. On the south elevation, a concrete stairwell, with a metal rail, which leads to the building's basement. The basement steps and entrance are sheltered by a pent roof that protrudes from the base of the

Observed Alternations:

main floor.

- Original multi-light wood-framed windows replaced with aluminum-frame sliding windows.
- Gutters added to north and south elevations



Looking northeast at the south and west elevations (IMG 0355)

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• Fascia boards removed from north and south elevations.

Doors replaced.

Year Built: c. 1944

Architectural Style: Spanish Colonial

Revival

Description: Building 448, the Barracks and Mess Hall building, was constructed in c. 1944. The one-story building has a rectangular footprint that is constructed on a concrete crawlspace foundation. The long, narrow building has a front-gable, moderately pitched roof with shallow eaves and asphalt tile cladding. There are louvred rectangular vents in the gable-walls, located on the north (main) and south (rear) elevations, over pent roofs that are supported by circular metal posts. The roofs shelter the building's wooden doorways, which feature upper glazing in aluminum frames. Fenestration includes evenly spaced sliding windows in aluminum frames. Building 448, which has been heavily modified overtime, is currently clad in stucco.

Observed Alternations:

- The original siding, roof surfacing, and wood sash windows were removed and replaced with stucco siding, composition roofing, new woof entry doors with upper glazing, and aluminum-framed sliding windows.
- c. 1965, the USGS constructed an addition on the north elevation.
- c. 1979. the US Navy constructed a second full-width addition to the south elevation.
- In c. 1985, an addition was constructed on the building's east elevation, creating a T-shaped floorplan.
- c. 1990- removed the c. 1985 wing addition and continued to update the building continuously throughout its lease.

448-Barracks



Looking west at the north and east elevations (IMG $_0355$)

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444-Seawater Intake System

Year Built: c. 2010

Architectural Style: Utilitarian

Description: The small, shed roof building is situated north of Building 448. The rectangular building has a moderately sloped shed roof with wide eave overhangs, clad in composition shingles. The building is clad in stucco and sits on a concrete foundation.

Observed Alternations: None noted



Looking west at the south and east elevations (IMG 0267)

452- Stellar Biotechnologies Building

Year Built: 2019

Architectural Style: Utilitarian

Description: The Stellar Biotechnologies Building was constructed in 2019. The structure sits on a concrete foundation and is constructed of metal with stretched plastic covering. The structure measures approximately 88-feet by 71-feet.

Observed Alternations: None noted



*B10. Significance (Continued):

Review of Previous Documentation

Dudek conducted research to obtain prior documentation of resources within the vicinity to help ensure consistency in documenting the current status of the property as a historical resource. The following documents pertain to past documentation efforts within the Light Station. These records were obtained through a review of the California Historical Resources Information System Records Search results, the Built Environment Resource Directory (BERD), online searches, inquires with state agencies, or from the Port.

State of	California	- The R	esource	es Agen	су
DEPART	MENT OF	PARKS	AND R	ECREA	CION

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C. Baker and J. Dougherty. 2003. National Register of Historic Places Evaluation of Port Hueneme Lighthouse (Report No. VN-02684)

This NRHP nomination form documents an evaluation of the historic Lighthouse and associated buildings. The purpose of the assessment was to evaluate the Port Hueneme Light Station for inclusion in the NRHP and does not include an evaluation of the property for CRHR. The nomination form documents the Light Station including the Port Hueneme Lighthouse and two c. 1939 Keepers' quarters [Buildings 416 and 428]. The report concluded that the Port Hueneme Lighthouse appears eligible for listing in the NRHP under the NRHP Multiple Property Documentation (MPD) form for Light Stations of the United States and NRHP MPD Form for Light Stations of California under Criterion A for its association with the development of import-export trade in Southern California and under Criterion C as the only example of an Art Moderne-style Lighthouse in California. In addition to the Lighthouse, the nomination also addresses the two c. 1939 Keepers' quarters concludes that due to a loss of integrity of setting and feeling, they do not appear eligible for listing on the NRHP. The fog signal structure is also not eligible due to its modern construction. An accompanying DPR form set form set was prepared by Tracy Bakic in 2003 in conjunction with the nomination form which recorded the Historic Port Hueneme Light Station but did not include a formal evaluation under NRHP or CRHR criteria (Bakic 2003).

The nomination form included the following significance assessment of the Lighthouse and the two c. 1939 Keepers' quarters (C. Baker and J. Dougherty 2003: p. 8-3):

The Port Hueneme Light Station was constructed by the United States Coast Guard in 1941 to replace the original 1874 Point Hueneme Light Station that provided an important navigational aid to the frequently fog-choked entrance to Santa Barbara Channel. The lighthouse was constructed as part of the creation of the Port Hueneme harbor, the only deep-water port between Los Angeles and San Francisco. This port greatly enhanced the import-export economy of the region, and the light was crucial to its successful operation. As a result, the lighthouse appears to meet Criterion A as a significant structure. The lighthouse is an excellent representative example of the Art Moderne lighthouse design used by the Coast Guard on the Pacific Coast during the 1930s and early 1940s and, is the only one of its kind in California; as such, it appears to meet Criterion C as a significant structure. The lighthouse retains its integrity of location, materials, association, design, and workmanship, although its integrity of setting and feeling have been compromised by surrounding development since 1941, the lighthouse's date of construction and period of significance. As a result, the lighthouse appears to be an historical resource eligible for listing in the National Register of Historic Places under the nationwide Multiple Property NRHP Form for U. S. Lighthouses and Multiple Property NRHP Form for Light Stations of California.

Alterations to the two c. 1939 keeper's quarters originally associated with the lighthouse have greatly compromised their integrity of design, materials, and workmanship. Nearby development has destroyed their integrity of setting and feeling from the time of their construction. As a result of this loss, the keepers' quarters do not appear to be eligible for listing on the National Register of Historic Places. Also, the fog signal structure is a modern building and not eligible for listing on the National Register.

Sharpe, J. and L. Durio. 2004. Groundwater Recovery Enhancement and Treatment Program (GREAT), Cultural Resources Inventory Report (Report No. VN-02978)

The purpose of the Cultural Resources Inventory report was to assess the potential impacts the proposed GREAT program would have on known and unknown historical and archaeological resources. The survey identified two prehistoric sites (CA-VEN-666 and CA-VEN-726) and six historic sites (P-56-150013, P-56-150014, P-56-150020, P-56-150023, P-56-150028 and P-56-150029) previously recorded sites within the APE. It was determined that the proposed project would not have adverse effects on known site CA-VEN-666 because it was previously described as a "non-site" and archaeological

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monitoring would be required for CA-VEN-726. Mitigation recommendations included avoidance of several cultural resources as well as expanded cultural monitoring of any ground disturbance.

Lieutenant Commander J. W. McPherson. 2012. Letter Report on the Decommissioning of the Fresnel Lens at Point Hueneme Lighthouse (Report No. VN-03124)

The letter report documents correspondence between Lieutenant Commander J. W. McPherson and California State Parks Office of Historic Preservation, Ed Carroll about the proposed decommissioning of the historic Fresnel Lens at the Lighthouse that overlaps the current proposed project site. The purpose of the report was to determine any adverse effects of the proposed removal and relocation of the historic Fresnel lens within the Port Hueneme lantern room to the Lighthouse museum, located on site. The letter report was submitted and SHPO concurred with the finding of eligibility is relation to the Lighthouse and as the project work would be confined within the Lighthouse, agreed that no adverse effects on any historic structure or archaeological resources would occur.

The letter report included the following significance assessment (McPherson 2012: 4):

While Point Hueneme Light Station is not listed on the National Register of Historic Places (NRHP), it is assumed to be eligible for the NRHP, due to its Moderne architectural style (unique among California lighthouses) and its importance to the history of maritime navigation on the California coast. USCG is currently preparing nomination paperwork for the lighthouse. The historic Light Station included, in addition to the lighthouse, a fog signal building (replaced with a modern structure in 1998), at least two sets of quarters, and several other structures supporting USCG and Navy use of the property. The USCG now retains only the existing lighthouse and modern fog signal, as the USCG transferred this parcel, with the exception of the lighthouse and fog signal, to the Navy in 1974. Subsequently, the Navy transferred the land as a part of a 33-acre disposal to the Oxnard Harbor District in 1997. At present, the land underlying and surrounding the lighthouse and fog signal is owned by the city of Port Hueneme through the Oxnard Harbor District

Tracy Bakic. 2003. DPR 523 form set for the Port Hueneme Light Station (P-56-152840)

The DPR form set prepared for the Historic Port Hueneme Light Station (the Lighthouse and associated buildings and structures) in 2003 by Tracy Bakic of PAR Environmental Services Inc. (Bakic 2003) documents a 5-acre complex of buildings consisting of the 1941 Lighthouse, the 1939 Keepers' quarters, the circa 1950s barracks, as well as associated outbuildings including garages. Bakic noted the prior 1874 wood-framed Lighthouse and associated structures had been demolished. The DPR form does not include a formal evaluation of the Light Station. An accompanying NRHP nomination form was completed in conjunction with the DPR form set prepared by C. Baker and J. Dougherty in 2003 which evaluated the Port Hueneme Lighthouse and two c. 1939 Keepers' quarters buildings (C. Baker and J. Dougherty 2003).

The following text pertaining to the significance of the Lighthouse accompanied the DPR 523 form set in a summary letter prepared in 2003 by PAR Environmental Services Inc. for the U.S. Coast Guard (Bakic 2003):

The Port Hueneme Lighthouse has been determined eligible as part of a Multiple Property Listing of the National Register of Historic Places. The facility is in use as a navigational aid and actively managed by the Coast Guard. The station includes a fog signal building with attached lighthouse (1941) and a modern fog signal. The lighthouse is eligible under Criterion C as an excellent example of Art Moderne lighthouse design that reflects a construction style used for a number of twentieth

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century light stations. Its period of significance is 1941, its year of construction and activation.

The Built Environment Resource Directory

The BERD files provide information, organized by county, regarding non-archaeological resources in the Office of Historic Preservation's inventory. The BERD contains information only for built environment resources that have been processed through the Office of Historic Preservation. This includes resources reviewed for eligibility for the NRHP, and the California Historical Landmarks programs through federal and state environmental compliance laws, and resources nominated under federal and state registration programs. The BERD replaces the former Historic Properties Directory that previously provided evaluation status information for resources processed through the Office of Historic Preservation. Dudek accessed the BERD for Ventura County on June 16, 2022 and identified an entry pertaining to the Port Hueneme Light Station. According to the BERD, the Port Hueneme Light Station was most recently determined eligible following consultation with SHPO (USCG_2013_0520_001). (Appendix D) in June 2013 and presently maintains a CRHR status code of 2S2 (Individually determined eligible for NR by consensus through Section 106 process. Listed in the CR).

Bookwalkter. 1989. National Register of Historic Places Multiple Property Documentation Form: Light Stations of California.

This National Register of Historic Places multiple property nomination form provides a comprehensive historic context covering Maritime Transportation in California between 1840 and 1940. Given the importance of maritime transportation in California history asserted in the context section, Light Stations are identified as an associated property type. The document provides registration requirements and an overview of common light station components, associated construction methods, architectural styles, physical condition, and physical setting.

Clifford. 2002. National Register of Historic Places Multiple Property Documentation Form: Light Stations in the United States.

This nomination form provides a comprehensive historic context covering the history and management of light stations throughout the United States beginning in 1789 through 2003. The document provides a broad overview of Lighthouse construction including tower and foundation types, common light station components (ancillary buildings and structures), regional adaptations and variations, site placement, and commonly employed architectural styles. The document also provides parameters for registration requirements, a hierarchy of character-defining features, a guide to assessing integrity and determining significance for this unique resource type.

Ventura County Cultural Heritage Board Staff. 2019. Ventura County Historical Landmarks and Points of Interest.

In 1980, the Lightworks in the Hueneme Lighthouse were designated as a Ventura County Historical Landmark. The lightworks were manufactured in 1897 in France and is composed of six handmade lens panels designed for an oil lantern and operated by timing gears and weights. It was originally installed in 1874 at the original Port Hueneme Lighthouse. In 1925, the light was electrified. In 1940 the original Lighthouse was moved and the Lightworks was moved into the 1941 Port Hueneme Lighthouse.

EZ Studio Inc. 2022. Port Hueneme Light Station Structural Evaluation and Assessment Report. 2022.

In 2022, EZ Studio Inc. was obtained to perform a structural evaluation and assessment of the existing residential & shop building located within The Port of Hueneme, CA. The structures, which are the basis for this report, are located adjacent to the Port Hueneme Lighthouse (Appendix E).

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Historical Overview

The following historic context chronicles the pertinent information related to the history and contextual development of Port Hueneme. The following sections contain sections of text presented verbatim in their entirety from multiple relevant documents including the National Register of Historic Places Multiple Property Documentation Form: Light Stations in the United States (Clifford 2002), the National Register of Historic Places Registration Form for the Port Hueneme Lighthouse (C. L. Baker and J. Dougherty 2003), and the DPR 523 form set for the Port Hueneme Light Station (Bakic 2003). References to figures, footnotes, and parenthetical citations within these sections of quoted text have been retained, however, they do not correspond to the photographs or the references presented throughout the remainder of this document and in the sources cited in References (C.L. Baker and J. Dougherty 2003: pp 8-1 - 8-3; Clifford 2002: pp. 51-53; Bakic 2003: pp. P1-P2).

Development of Light Stations on the West Coast

The following text pertaining to the development of Light Stations along the West Coast of the United States is presented verbatim in its entirety from National Register of Historic Places Multiple Property Documentation Form: Light Stations in the United States (Clifford 2003: pp. 51-53).

West Coast

Prior to the building of the transcontinental railroad in 1869, the west coast of the United States was dependent upon maritime transportation for its connection to the rest of the world. North-south railroad links were not completed until 1887. Even road networks were not sufficiently developed until well into the 20th century. With this heavy dependence on water shipping, it is not surprising lighthouses were relatively early developments for the west coast.

Francis A. Gibbons of Baltimore, in addition to building Love Point Lighthouse (1872), and repair work on Point Lookout (1830) and Sharps Island (1838) lighthouses in Maryland, also built Bodie Island Lighthouse (1847), North Carolina, and Egmont Key Lighthouse (1848), Florida. Pleasonton said, Gibbons "has done some work very faithfully for us." Gibbons most ambitious lighthouse endeavor, however, was obtaining a contract in partnership with Francis X. Kelly in 1852 to construct the first eight lighthouses on the West Coast of the United States. They obtained a bark appropriately named Oriole, acquired materials and laborers, and sailed for the West Coast. Despite the wrecking of Oriole at the mouth of the Columbia River, these two Marylanders completed all eight lighthouses by 1856. 118

The first lighthouses on the west coast, designed at about the same time as the one at Blackistone Island (1851), Maryland, were intended to use the Argand lamp and parabolic reflector lighting system. The masonry tower rose from the foundation, through the center of the dwelling and through the roof. The towers of the eight lighthouses were each substantial enough to stand by themselves. The lanterns were not, however, of a proper size to support the recently adopted Fresnel lens. The District Inspector, Major Hartman Bache, was a pragmatic person, and solved the problems in different ways. At Farallon Islands, he tore down and rebuilt the lighthouse to receive a first-order lens. At the Point Loma Lighthouse (1855) in San Diego, California, he decided to use the smaller third-order lens. But even with the smaller and lighter lens, he had to have the tower strengthened by increasing the thickness of the domical arch (the ceiling of the tower) to support a third order lens. 119 Many later West Coast light towers were integral to the fog signal building. Examples include Point Sur Lighthouse (1889), California; and Coquille River Lighthouse (1896) and Cape Arago Lighthouse (1934), both in Oregon.

Steel, in concrete structures, provides the tensile properties concrete lacks. Most major reinforced concrete towers are found on the West Coast where they are best adapted to the dangers of earthquake damage. Examples include Point Arena (1908) and Point Arguello Lighthouse (1934), both California. A series of art-moderne reinforced concrete lighthouses

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were built along the Alaska coast in the 1920s and 1930s, replacing earlier deteriorated wooden structures. 120 Examples include Cape Decision (1932), Cape Hinchinbrook (1934), Cape Spencer (1925), Cape St. Elias (1916), Five Finger Islands (1935), Point Retreat (1923), Sentinel Island (1935) and Tree Point (1935).

On the west coast, a number of lighthouses have been placed where coasting traffic makes a course change or leaves the coast. These are major lights, usually of the first order. Cape Mendocino (1868) in northern California was a turning point for both north and southbound traffic. This light was particularly important because it also guards vessels against nearby dangerous waters. Point Sur (1889) and Piedras Blancas (1879) are two lighthouses marking the point for departure or return to the coast, depending on the direction in which the vessel is traveling.

The west coast has several lighthouses built just offshore on rocks that are serious hazards to navigation. Tillamook (1881), Oregon, and St. George (1892), California, are two such lighthouses, and they were difficult and expensive to build because of their offshore location and rough seas. Tillamook served as a warning of the rock and as a guide to the Columbia River. St. George, on an offshore reef, guarded ships against a larger area of rocks and shoals.

Development of the Port Hueneme Light Station

The following text is presented verbatim in its entirety from National Register of Historic Places Registration Form for the Port Hueneme Lighthouse prepared by C. L. Baker and J. Dougherty of PAR Environmental Services, Inc. in 2003. (C. Baker and J. Dougherty 2003: pp. 8:1-8:3).

Introduction

As long as there have been ships upon the seas, navigational aids have been part of the human endeavor. In the centuries before air travel, nations relied upon the safe passage of ships, including the United States. Congress passed the Lighthouse Act of 1789 to take responsibility for building and operating such aids along its coasts. Since then, the government has constructed over a thousand lighthouses, hundreds of fog signals and almost 200 floating light signals. The government created a specialized Lighthouse Board in 1852, which became the Bureau of Lighthouses in 1910. These early years make up the period of the Lighthouse Service, which merged with other federal maritime agencies in c. 1939 to establish the U.S. Coast Guard (United States Department of the Interior [USDI], National Park Service [NPS] 2002:2).

The United States Coast Guard (USCG) Port Hueneme Light Station grounds are located at the southern side of the Port Hueneme, Oxnard Harbor District basin entrance. The Port Hueneme Lighthouse is situated at the north side of the east entrance to the Santa Barbara Channel. The signal is important to navigation through the channel, which is typically fog-bound from July through October when inland temperatures rise. The port is the only deep-water port between Los Angeles and San Francisco and is important for foreign trade. The lighthouse grounds encompass an approximately five-acre area that includes extant USCG-built structures dating from circa 1938 to 1964. Historically, the Light Station grounds were located at the west end of the USCG Point Hueneme Reservation. With the formation of the Oxnard Harbor District in 1937 and the opening of the Port of Hueneme in 1940, the USCG facility officially became known as the Port Hueneme Light Station. In the 1970s the USCG Light Station was part of property transferred from USCG to the US Navy. In 1997 it was part of 33 acres of Naval property transferred to Oxnard Harbor District. USCG has retained ownership of the lighthouse (Brown 2003; Marsh 2003).

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Historical Context

The Santa Barbara Channel extends 63 miles along the southern California coast between Point Fermine (near San Pedro) and Point Hueneme on the north end. The channel is defined on the west and south by the San Miguel, Santa Cruz, Santa Rosa, and Anacapa islands, known collectively as the Channel Islands. Portuguese explorer Juan Rodriguez Cabrihlo was the first to sail the channel in the fall of 1542. In the following centuries, Spanish missionaries established a scattering along the coast, but the population remained low until the years following the California Gold Rush and statehood in 1849. From that year forward, the number of ships traveling the waters of the channel would continue to grow (Nelson and Nelson 1993:29).

The original Point Hueneme Lighthouse site was located on 16.14 acres of the Rancho El Rio de Santa Clara o La Colonia, purchased by the U.S. Lighthouse Service for \$17. The first lighthouse on the point was constructed in 1874 and was activated the same day as the Point Fermin Lighthouse to the south; December 15, 1874. These two Victorian-style lighthouses marked the entrances to the Santa Barbara Channel, an important shipping lane between the southern California coast and the Channel Islands. Eventually four lighthouses were established along the channel (Nelson and Nelson 1993:29, 31).

The Point Hueneme site included the keeper's dwelling, identical to those built at East Brother in Oakland, California and Point Adams, Oregon, in addition to that at Point Fermin mentioned earlier. Water for the site was drawn from artesian wells, but by 1882 the wells were impure and rainwater from the station's roofs was collected in a 10,000-gallon tank. In 1889, the original white flashing oil light on the lighthouse was changed to a fixed red light. In 1892, it was changed to an occulating white light. In 1899, the Service installed a revolving fourth order Fresnel lens made by Barbier and Benard in 1897 (which remains to the present day) (Nelson and Nelson 1993:32).

In 1900, the Lighthouse Service purchased another adjacent 30 acres of the El Rio de Santa Clara o La Colonia for \$2,000. Of the combined 46 acres at the Point Hueneme site, various parcels would be carved out and sold to private companies or transferred to the Department of the Navy over the following century. By 1922, the station consisted of the Lighthouse Service and a Navy Radio Station. The Lighthouse included the original lighthouse with keeper's dwelling. The structure had two sets of quarters to house the two lighthouse keepers and their families. In total, the dwelling had 1350 square feet of floor space comprising a total of eight rooms. The site also included a fog signal building, a carpenter shop, two storehouses, a barn, a hollow tile oil house and a concrete oil house. The navy's radio compass station, established three years earlier, consisted of three additional buildings on a separate portion of the lighthouse reservation. In 1928, the Naval Radio Compass Station was transferred to the Lighthouse Service (Lighthouse Service 1922).

In 1925, the oil lamp in the lighthouse was replaced with an electric light and in 1933 an electric motor was installed at the lighthouse to eliminate the hand-winding of the light's clockwork (Nelson and Nelson 1993:33).

In c. 1939, work began to create a deep-water port was created near the site, which required dredging the entrance along the point. In the process, the original lighthouse had to be moved. A local yachting club purchased the lighthouse/keepers' quarters structure and moved it across the harbor, although it was later demolished. The lighthouse lantern room was removed from the building before the move and replaced in the new lighthouse under construction (Nelson and Nelson 1993:32). Port Hueneme, as it became known, remains the only deep-water port between Los Angeles and San Francisco.

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To replace the housing lost by the move of the lighthouse structure, the Coast Guard built two cottages for the keeper and assistant keeper in c. 1939. These structures were actually finished before the move. The two identical cottages were designed with roughly 1,230 square feet of interior space in each unit.

With the housing in place, the Coast Guard built the present lighthouse, which is a 48-foot-tall concrete tower rising from a one-story building. The focal plane is 52 feet above sea level and was lit with the original 1874 lantern and 1899 fourth order Fresnel lens operated by the original clockworks system. The light was activated in 1941. The tower is square and rises from the rectangular building below. The structure presents an Art Moderne architectural styling that was used at other Coast Guard lighthouses built during the period, most notably the Sentinel Island Lighthouse in Alaska (Nelson and Nelson 1993:32).

By 1958, the property included a mixture of USCG and Navy structures, including the new lighthouse/fog station, the c. 1939 keepers' quarters, a wood-framed barracks/mess hall, another single-story wood-framed keepers' quarters (north of the barracks), a small wood-framed garage, pump house (converted to an electrical vault by 1960), pressure tank, paint locker, radio mast, and a United States Navy winch house (with living quarters). The additional keeper's quarters (a house built circa 1927), small garage (circa 1927) and possibly the barracks and a radio building were moved to this location in 1940s from the USCG Radio Station that was about 1,000 feet to the east; the radio station buildings were probably moved due to World War II (WWII) military usage of the eastern end of the reservation.

Between 1961 and 1962 additional keepers' quarters were constructed (two houses and a garage) and the circa 1927 house, paint locker and radio building were removed. By the 1960s, the property had a separate fog signal structure located to the west side of the Navy's winch house. The electrical vault was removed after 1973 and the circa 1927 garage was removed after 1980. The fog signal was removed in the late 1990s and replaced with the extant metal signal that is in the same location.

The lighthouse was automated in 1972. As a result, onsite housing became unnecessary. The station was disestablished in 1973 when a new Coast Guard station was constructed at Channel Islands Harbor. Some of the land at Port Hueneme Light Station was then transferred to the Navy at that time.

At present the approximately five-acre area (Figure 4) includes the 1940 lighthouse/fog station, the c. 1939 and 1962 keepers' quarters (including garages), heavily modified barracks building, modified circa 1950s Navy winch house, and several structures built less than 35 years ago by the Navy and subsequent tenants, such as Channel Islands Marine Resource Institute (CIMRI) and Stellar Biotech (formally called ABLAB). The modern buildings include metal-clad warehouses and a "test bed" house built in the late 1970s or early 1980s by the Navy for solar studies. The access road that enters the light station area and ends at the lighthouse/fog station as a cul-de-sac was in place over 50-years ago. The center of the cul-de-sac originally included a flagpole; the flagpole was removed at an unknown date.

In 1999, the lantern room and window frames of the lighthouse were painted red during a refurbishing effort. The original lighthouse's fourth order Fresnel lens is still in use at the current Port Hueneme Lighthouse (Nelson and Nelson 1993:32). The fog signal structure uses the original single diaphone type fog signal. The Port Hueneme facility is part of the Eleventh Coast Guard District.

History of Buildings within the Port Hueneme Light Station

The following text is presented verbatim in its entirety from the California DPR form completed for the Port Hueneme Lighthouse prepared by Cindy L. Baker of PAR Environmental Services, Inc. in

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2003. Building dates in the following text do not all correlate with current research presented in this report. Current USCG building identification numbers in brackets have been added by Dudek (Bakic 2003: pp.P1-P2).

The United States Coast Guard (USCG) Port Hueneme Light Station grounds are located at the southern side of Port of Hueneme, Oxnard Harbor District basin entrance. The grounds encompass an approximately five-acre area that includes extant USCG-built structures dating from circa 1938 to 1964. Historically, the light station grounds were located at the west end of the USCG Point Hueneme Reservation. With the formation of the Oxnard Harbor District in 1937 and the opening of the Port of Hueneme in 1940, the USCG facility officially became known as the Port Hueneme Light Station. In the 1970s the USCG light station was part of the property transferred from the USCG to the US Navy. In 1997 it was part of 33 acres of Naval property transferred to the Oxnard Harbor District. The USCG has always retained use of the lighthouse (Brown 2003; Marsh 2003), even while relinquishing ownership of the land.

Prior to the construction of the extant lighthouse/fog station in 1940, the light station included the previous 1874 wood-framed lighthouse with incorporated keepers' quarters, a temporary fog signal building, the circa 1938 keepers' quarters (two houses and a garage) [Buildings 422, 428, and 416], an artesian well and pump house. The 1874 lighthouse was barged across the harbor in February 1940 and was razed only a few years later. By 1958, the property included the new lighthouse/fog station [Building 440], the circa 1938 keepers' quarters) [Buildings 422, 428, and 416], a wood-framed barracks/mess hall [Building 448], another single-story wood-framed keepers' quarters (north of the barracks), a small wood-framed garage, pump house (the electrical vault by 1960), pressure tank, paint locker, radio mast, and a United States Navy winch house (with living quarters). The additional keepers' quarters (a house built circa 1927), small garage (circa 1927) and possibly the barracks and a radio building were moved to this location in 1940s from the USCG Radio Station that was about 1,000 feet to the east; the radio station buildings were probably moved due to WWII military use of the eastern end of the reservation.

Between 1961 and 1962 additional keepers' quarters were constructed (two houses and a garage) [Buildings 406, 408, 400] and the circa 1927 house, paint locker and radio building were removed. By the 1960s, the property had a separate fog signal structure located to the western side of the Navy's winch house; this fog signal was removed in the late 1990s and replaced with the extant metal signal that is in the same location. The electrical vault was removed after 1973 and the circa 1927 garage was removed after 1980.

At present the approximately five-acre area includes the 1940 lighthouse/fog station [Building 440], the c. 1939 and 1962 keepers' quarters (including garages) [Buildings 422, 428, and 416, 406, 408, 400], heavily modified barracks building circa 1950 [Building 448], modified circa 1950s Navy winch house, and several structures built less than 35-years ago by the Navy and subsequent tenants, such as the Channel Islands Marine Resource Institute (CIMRI) and Stellar Biotech (formerly called ABLAB). The modem buildings include metal-clad warehouses and a "test bed" house built in the late 1970s or early 1980s by the Navy for solar studies [Building 404]. The access road that enters the light station area and ends at the lighthouse/fog station as a cul-de-sac was in place over 50-years ago. The center of the cul-de-sac originally included a flagpole; the flagpole was removed at an unknown date.

Architectural Styles and Building Types

Architectural Style: Art Moderne (1928-1941)

According to the National Register of Historic Places Multiple Property Documentation Form: Light Stations in the United States, the Art Moderne architectural style was often employed in the design of Light Stations in the United States as demonstrated "... by the last caisson lighthouse built in

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the United States, Cleveland East Ledge Lighthouse (1943), Massachusetts; and Huron Harbor Lighthouse (1936), Ohio (Clifford 2003: pp. 41)."

The Art Moderne style describes a popular style of architecture that developed in the 1930s as a response to the Great Depression as a response to the more opulent forms of the Art Deco style. While examples of the style predate the New Deal era, due to its frequent use by architects for federal projects under the New Deal 1933, the style has come to have a strong association with undertakings of the PWA. Art Moderne buildings are characterized by classical, conventional forms in line with the clean, formal Beaux Arts style which have been updated with modern stylistic elements drawn from the early 1920s Art Deco and Streamline Moderne styles. The style was frequently employed in California in the construction of public schools.

The character-defining features of the Art Moderne style include the following (Gebhard 1985: 578; Marter 2011: 147; McAlester 2013: 580):

Basic classical balance and symmetry including horizontal proportions.

Flat roofs usually with small ledge at roofline

Rounded bays and projecting wings

Use of piers in place of columns. Piers can be fluted, but generally contain no base or capitals.

Inset Windows arranged in vertical panels

Wrap around, porthole and glass block windows

Smooth exterior surfaces, usually stucco

Use of relief sculpture and interior murals

Architectural Style: Spanish Colonial Revival (1915-Present)

According to the National Register of Historic Places Multiple Property Documentation Form: Light Stations in the United States, the Spanish Revival Style was often employed in the design of Light Stations in California as demonstrated "... in structures at Point Conception (1882), Point Vicente (1926), near Los Angeles, and Anacapa Light Station (1932), Anacapa Island, all in California (Clifford 2003: pp. 41)."

The Spanish Colonial Revival style has a rich history and popularity in California. The history of the style began with architectural forms originating in Spain that were carried to California during the Spanish Period. The Moors had a truly significant impact on the architectural development and heritage of Spain, when they brought with them a rich Muslim architectural tradition that was based on the Islamic patterns of architectural development seen throughout the Middle East. The combination of the Spanish and Moorish influence became known as the Hispano-Moorish (also referred to as Hispano-Moresque) architectural style. The height of Hispano-Moorish architecture in the Iberian Peninsula was from the 8th century to the 15th century and there was a significant revival during the 19th and early 20th centuries throughout Europe and the Americas (NGS 2017; Curl 2006).

During the Spanish colonial period in the late 1400s, the Spanish brought the architectural traditions known as the Hispano Moorish style to the Americas. The convergence of Christian and Islamic traditions seen in America is most often referred to as Mudèjar. The convergence of religious and architectural traditions during the Spanish Colonial period set the stage for the Spanish Colonial Revival architectural movement that gained great popularity in California following its formal debut at the San Diego Fair in 1915. Californian Architects Bertram G. Goodhue and Carleton M. Windslow helped to popularize the style well into the 1920s and 1930s, by which time the style was well represented in many coastal cities throughout California. The popularity of the style persisted well into the second half of the 20th century, spurring interest in new, offshoot styles such as the Monterey Revival and even the California Ranch House. During the 1970s and the 1980s, the style was frequently employed for commercial architecture including shopping malls and retail centers (Gebhard 1985: 573-4).

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The character-defining features of the Spanish Colonial Revival style include the following (Gebhard 1985: 573-4):

Asymmetrical façades

Sprawling, irregular massing

Low pitched roofs fitted with clay tiles

Stucco walls that predominate over openings

Limited number of openings, often deeply recessed into the wall surface and irregularly placed Arched entryways

Heavy, wood entry doors with single or no light

Decorative wrought-iron screens and details for windows, doors, balconies, and hardware

Turned-wood grilles over windows and doors

Relationship to outdoors through the use of French doors, terraces, courtyards and pergolas

Building Type: Light Tower

The following text pertaining to the Light Tower is presented verbatim in its entirety from National Register of Historic Places Multiple Property Documentation Form: Light Stations in the United States (Clifford 2003: p. 31).

The tower served principally as a support for the lantern that housed the light. The lantern was typically a cast-iron round, square, octagonal, or decagonal-shaped enclosure surrounded by an exterior stone or cast-iron gallery with railing. Access to the lantern at the top of the tower was via stone, wood, or cast-iron stairs which either wind around a central column or spiral along the interior sides of the tower walls (a few had straight sets of stairs which ran from landings around the tower interior). Windows in the tower were positioned to provide daylight onto the stairs. For taller towers, landings were provided at regular intervals. The top landing ended at the watch room where the keeper on duty ensured the optic was functioning properly. The lantern room above was usually reached via a ladder.

The most recognizable lighthouse type is the stand-alone tower such as Cape Hatteras Lighthouse. Lighthouses of this type come in many shapes including conical, square, octagonal, cylindrical, and even one triangular. Lighthouse towers may also be attached or integral to the keepers' dwellings, and in a few cases, fog signal buildings. Attached towers are those connected to a keeper's quarters to another structure, often by a hyphen; whereas integral towers are those structurally built into the structure with the tower extending through the roof.

Building Type: Keepers' Dwelling

The following text pertaining to the Keepers' Dwelling is presented verbatim in its entirety from National Register of Historic Places Multiple Property Documentation Form: Light Stations in the United States (Clifford 2003: p. 32).

Second in importance to the light tower, dwellings for light keepers and their families were generally, in the early days, simple 1 and 1/2-story wooden or stone structures. Since lighthouses had only one keeper, there was only one dwelling. After 1852 with the coming of the Fresnel lens and the Lighthouse Board, more keepers began to be assigned to light stations, and, of course, it became necessary to have more living accommodations. Keeper's quarters could be single, double, triple, or even quadruple dwellings; they reflected the prevailing architectural styles, adaptations to geographical conditions, or regional tastes. Complaints by keepers concerning lack of privacy for their families finally persuaded the Lighthouse Board not to build tri-plex housing. By 1913, the U.S. Lighthouse Service stressed that a recent practice

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favors detached houses, insuring greater privacy, and giving better opportunity for yards and gardens.

For all practical purposes, prior to 1852 there were two types of land-based lighthouses: either a detached dwelling or an integral dwelling with the light tower rising out of the roof. The early integral towers had the tower supported by the roof system. As time went on with the lighting apparatus getting heavier, particularly with the advent of the Fresnel lens, the tower was supported from the foundation of the keeper's dwelling. The plans for Blackistone Island Lighthouse in the Potomac River, designed in 1852, clearly shows the support system ascending from the ground. The two-story dwelling had the wood tower rising through its center. Fortunately, this lighthouse needed only one keeper, even after the introduction of the Fresnel lens. In colder climates, such as New England and the Great Lakes, the light tower often was either attached to the dwelling or an enclosed passageway was built between the two structures.

Building Type: Garage

The following text pertaining to Garages is presented verbatim in its entirety from National Register of Historic Places Multiple Property Documentation Form: Light Stations in the United States (Clifford 2003: p. 36).

Some of the light stations received government-built barns where horses and perhaps a cow could be sheltered. With the coming of the automobile, light stations began to receive garages. Because they are recent, a number of garages survive; certainly more garages survive than barns. These structures were simple, standard garage structures with up to three bays. Many barns were converted to garages including Pensacola Light Station, Florida and Montauk Point Light Station, New York. The resourcefulness of lighthouse personnel is illustrated by the 1950s conversion of a garage into living quarters at Cove Point Light Station, Maryland. The garage had been moved and remodeled into a dwelling.

Results of Identification and Evaluation Efforts

To establish methods for evaluating the Port Hueneme Light Station, Dudek's architectural historians reviewed all available previous documentation for the site. The review led to the following outline of the property's development: the Port Hueneme Light Station is a multicomponent site containing eight historic era buildings constructed between c. 1939 and 1961, and four modern buildings completed between 1977 and 2019.

In 2003, the Lighthouse was evaluated and found eligible for individual listing in the NRHP under the NRHP MPD form for Light Stations of the United States and NRHP MPD form for Light Stations of California under Criterion A for its association with the development of import-export trade in Southern California, and under Criterion C as the only example of an Art Moderne-style lighthouse in California. In addition to the Lighthouse, the nomination also addressed the two c. 1939 Keepers' quarters originally associated with the Lighthouse and concludes that due to a loss of integrity of setting and feeling, they do not appear eligible for listing on the NRHP (C. Baker and J. Dougherty 2003). Additionally, the Port Hueneme Lighthouse was most recently determined eligible following consultation with SHPO (USCG 2013 0520 001) in June 2013 and presently maintains a CRHR status code in the BERD of 2S2 (Individually determined eligible for NR by consensus through Section 106 process, Listed in the CR). Dudek agrees with the 2003 NRHP evaluation findings that the Lighthouse appears individually eligible for listing under the NRHP MPD, Light Stations of California and the NRHP MPD, Light Stations in the United States. A DPR update form for this individual property can be found in Appendix A of this report. The DPR Update is limited to providing a brief description, summary of eligibility, and condition assessment since it was last recorded in 2013, and recent photographs of the site.

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As a multi-component site, Dudek's architectural historians reviewed the Light Station property for its potential as a historic district. According to National Register Bulletin 15: How to Apply the National Register Criteria for Evaluation (Bulletin 15), which is also used for CRHR, a historic district is defined as a resource that "possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development" (USDOI 1995: 5). Furthermore, Bulletin 15 states that, "A district must be significant, as well as being an identifiable entity. It must be important for historical, architectural, archeological, engineering, or cultural values" (USDOI 1995: 5).

The Light Station has expanded significantly since its initial construction. While eight of the buildings are over 45 years old, a significant number of alterations have been made since its original construction, specifically in the 1950s through the 1980s. Since 1977, four buildings have been added to the site adjacent to historic era components. Overall, the Light Station lacks temporal cohesion as a group of buildings and structures linked to a specific period of significance and does not rise to the level of consideration as a potential historic district. As such Dudek, has evaluated the Port Hueneme Light Station as a multi-component site.

In order to assess the historical significance and integrity of the buildings within the Port Hueneme Light Station, it was evaluated under the MPDs, Light Stations of California, Light Stations of the United States, and under CRHR criteria as a multi-component site. The property significance evaluation was prepared by Dudek architectural historians Adrienne Donovan-Boyd, MSHP, and Fallin Steffen, MPS who meet the Secretary of the Interior's Professional Qualification Standards for architectural history. The following evaluation includes a current physical description of the Light Station property's elements, and an evaluation of the Property for the NRHP and the CRHR. A complete DPR 523 form set, including the previous evaluations and the updated evaluation information, is presented in Appendix A.

Registration Requirements for Listing in the NRHP as Part of a Multiple Property Document.

As stated earlier, the Port Hueneme Lighthouse (Building 440) was is considered eligible as part of the NRHP MPD form Light Stations of California as well as the NRHP MPD form Light Stations in the United States (Bookwalkter 1989; Clifford 2002). The registration requirements stated in these documents is presented in the section below verbatim in their entirety as they directly apply to this resource. These registration requirements are stated here as they are applicable to apply to the station as a whole and are utilized in the evaluation of the overall property.

NRHP MPD form Light Stations in California

The following registration requirements are provided for evaluating light stations in California (Bookwalkter 1989):

F. Associated Property Types

IV. Registration Requirements

"California's National Register-eligible light stations possess integrity of workmanship, materials, character, and design, as well as associative significance by virtue of their role in history and in their setting. Based upon association alone, light stations meet the National Register criteria, but additionally, the existence of a functioning complex implies necessary important relationships that are represented in the present day by the remaining buildings and structures of the station.

Historically, California light stations were composed, at a minimum, of a light tower, keeper's dwelling, and a fog warning device. Any number of additional ancillary buildings or structures could be original features (such as a cistern, or barn) or later additions (oil houses).

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The minimum necessary requirements to adequately convey the historical function of a light station is the presence of a substantial lighthouse tower that was designed to hold a Fresnel lens, and one or more associated ancillary buildings.

Towers should be "substantial" to distinguish a lighthouse from the many "post beam" type structures that were erected in the late 19th and early 20th centuries. These were merely poles stuck in the ground with beacons stuck on top. They possess neither the necessary historical associations nor the architectural significance [...] (p. FIV-1)"

The integrity of each light station was evaluated with respect to all others in the state and in relation to its particular design, materials, and location. Those that failed to meet the registration requirements as set forth above in part F, section IV, were excluded from consideration for National Register nomination. Altogether, several light stations met minimum registration criteria but were replaced from consideration by other light stations that more fully exemplified the character set forth in the registration requirements. Ten light stations are hereby presented for consideration to the National Register (p. GI-1).

NRHP MPD form Light Stations in the United States

Additionally, the following registration requirements are provided for evaluating light stations within the context of the United States. These are detailed in the NRHP MPD form *Light Stations* of the United States (Clifford 2002: pp. 63-66).

Registration Requirements

What makes a lighthouse historic? Identifying historic lighthouses

Not all lighthouses or all structures at light stations are historic nor do all warrant preservation. But how does one determine historic significance of light station properties? How can one be certain that a light station or portion of a light station (only one or more structures of a light station versus a entire light station) warrant preservation? Perhaps the best method for determination, and the method required by the National Historic Preservation Act, is the criteria established for inclusion of properties in the National Register of Historic Places. Nearly 70 percent of all lighthouses in the United States (Coast Guard owned and otherwise) over 50 years old are either listed in the National Register of Historic Places or are determined eligible for listing, and the number is climbing as lighthouses and other light station structures are added to the list.

The National Historic Preservation Act of 1966 authorizes the Department of Interior to establish, maintain, and expand a National Register of Historic Places. This list is considered the official list of the Nations cultural resources worthy of preservation and is maintained by the National Park Service. The Register includes over 68,000 properties that have been recognized as having historic, architectural, archeological, engineering or cultural significance, at the national, state, or local level; this list grows steadily as more properties are identified and nominated each year. The nominations are maintained both on paper and in a computerized database.

Hierarchy of Character-Defining Features

The many structures and features of a light station should be considered cumulatively in accessing its integrity. The tower is vital to defining the station. Keeper's quarters are universal to light stations; sound signal buildings are not. The secondary structures that support the operation of the aid to navigation are significant, but their exclusion does

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not necessarily preclude eligibility for listing in the National Register. The following is a priority listing of the physical elements to consider.

- 1. Tower: Minimum consideration is daymark feature, i.e., shape and color to identify it to mariners. Does the tower still have its daymark characteristic? Daymark does not necessarily include presence of a lantern. For example, Bald Head Lighthouse meets only that minimum requirement.
 - a. Lantern: Ideally the light tower should have a lantern used during its period of significance. Lanterns did change over some lights' operational history to accommodate different lenses and operational requirements. An accurate replica lantern made of suitable materials is better than no lantern. A lighthouse without a lantern, Piedras Blancas Light or Egmont Key Light, for example, are eligible, however they should not be considered significant for architecture engineering under Criterion C, but could qualify as significant for transportation under Criterion A.
 - b. Lens: Ideally, the light tower should have an operational lens that was used during its period of significance. The next preference would be a non-operational lens used during its period of significance. A replacement Fresnel lens for a lens of the same order and characteristics is next in order of preference and then a Fresnel lens replacement lens of a different order o characteristic. This order of preference takes into account the historical practice of replacing lenses damaged in operation with a spare lens of the same order and characteristic from the inventory in storage. The damaged lens was then repaired and placed in storage until needed elsewhere. Also, the signal characteristics were modified as needed, to better serve the needs of the mariner.
 - c. Interior: Original access to the lantern should be intact, including original stairway, ladderways, and service room. Original interior detailing, such as molding, doors, door hardware, cabinetry also contribute to integrity.
 - d. Operational Features: Mechanisms for rotating the lens, lens pedestal, and ventilators.
 - e. Attached Structures: Towers were often built with attached work rooms, oil rooms, keeper' quarters, and fog signal buildings. It is preferable that these attached structures remain in place.
- 2. Keepers' Quarters: The presence of a keeper's quarters is preferable to a station without its keeper's quarters. A keeper's quarters that retains its configuration from the period of significance is preferable to one that does not. This also applies to assistant keeper's quarters.
- 3. Sound Signal and Sound Signal Building: Its presence, if part of the operational history, is preferable to none at all. The presence of the sound signal equipment is extremely rare and, therefore, especially significant.
- 4. Oil house, generator house, fuel tanks, workshop, which support the operation of an aid to navigation add to the completeness of a station.
- 5. Other subsidiary structures which add to the completeness of a station: a boathouse, garage/barns, pier, tramways, elevated walkways (transportation related) cisterns/wells, storage buildings, privies (support keeper)
- 6. Architectural features, such as gargoyles, finials, architectural detailing

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NRHP/CRHR Statement of Significance for the Port Hueneme Light Station (Multi-component Site)

As prior documentation efforts have been inconclusive on the eligibility of the overall facility, Dudek has evaluated the Port Hueneme Light Station as a multi-component site under NRHP and CRHR. The evaluation has been conducted in conjunction with an understanding of the relevant historic context. Dudek recommends the Port Hueneme Light Station facility as a whole does not meet the criteria under either the NRHP MPD, Light Stations of California and the NRHP MPD Light Stations in the United States, both as a multi-component site, as a stand-alone district, or as individual buildings on either the NRHP or the CRHR (Bookwalkter 1989; Clifford 2002).

Criterion A/1: That are associated with events that have made a significant contribution to the broad patterns of our history.

The Port Hueneme Light Station, which presently includes the Lighthouse and associated Keepers' Residences and accessory buildings, does not meet the registration requirements set forth in NRHP MPD, Light Stations of California or Light Stations in the United States (Bookwalkter 1989; Clifford 2002). National Register Bulletin 15 provides guidance on the evaluation of integrity related to the application of NRHP Criterion A and indicates that, "A property that is significant for its historic association is eligible if it retains the essential physical features that made up its character or appearance during the period of its association with the important event, historical pattern, or person(s) (USDOI 1995: 44)."

While the Port Hueneme Light Station has an association with the development of import-export trade in Southern California, the multi-component site does not retain integrity to convey this association. The Port Hueneme Lighthouse was recommended eligible as part of a 2013 Section 106 determination with a period of significance that includes the year the Lighthouse was constructed, 1941. None of the associated buildings were addressed in this previous documentation. As part of this project the Port Hueneme Light Station was evaluated as a multi-component site. The Port Hueneme Light Station does not retain integrity to a single period of significance individually, or as part of a grouping. Part of the minimum requirement for listing in the Light Stations of California MPD is the "existence of a functioning complex [that] implies necessary important relationships that are represented in the present day by the remaining buildings and structures of the station" (Bookwalkter 1989 F-IV). The site, as a whole, no longer retains enough integrity to convey a collective history to any period of significance. One of the most notable elements of integrity that is compromised is the integrity of setting. Significant changes to circulation patterns, introduction of new, large modern buildings, one of which, is located between the lighthouse and the Keeper's Residences, essentially separating the historic buildings on the site. Additionally, the change in use, of the Keepers' Residences, from active residential housing to vacant and/or storage space, has also greatly impacted the integrity of feeling, association, and setting of the Pre-World War II Light Station as a collective entity.

In summary, the Port Hueneme Light Station as a multi-component site does not meet the registration requirements set forth in the NRHP MPD, Light Stations of California or Light Stations in the United States under Criterion A, because the station is unable to convey its associative history with the development of import-export trade in Southern California due to a lack of overall integrity of the stie (Bookwalkter 1989; Baker 2003, Clifford 2002). Therefore, the Port Hueneme Light Station does not appear eligible under NRHP Criterion A or Criterion 1 of the CRHR.

Criterion B/2: That are associated with the lives of persons significant in our past.

To be found eligible under Criterion B the property has to be directly tied to an important person and the place where that individual conducted or produced the work for which he or she is known. Archival research did not indicate that the 1941 Port Hueneme Light Station is known to be directly related to historically significant figures at the national, state, or local level. Due to a lack of identified significant associations with important persons in history, the Port Hueneme Light Station does not appear eligible under NRHP Criterion B or Criterion 2 of the CRHR.

Criterion C/3: That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.

The Port Hueneme Light Station includes a working 1941, Art Moderne Style Lighthouse, a collection

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of associated Spanish Colonial Revival buildings from 1939 and 1961, and several large, contemporary buildings completed after 1961. The Lighthouse retains much of its character-defining features related to the Art Moderne Style including horizontal massing, rounded bays, and smooth exterior surfaces. The associated Keepers' Residences and ancillary building are modest examples of the Spanish Colonial Revival Style. The residences feature asymmetrical façades, low-pitched roofs fitted with clay tiles, and stucco exterior walls.

The building and the immediate surroundings have undergone several large-scale alterations beginning in the 1940s that have negatively affected the site's integrity of setting, design, materials, workmanship, feeling and association. The addition of several modern era buildings (Buildings 452, 432, 404, 436, and 444), the removal of most of the landscaping surrounding the Lighthouse, and the alterations to materials, especially the extensive changes to the Keepers' Residences and associated Garages (Buildings 428, 416, 422, 406, 408, and 400) have cumulatively diminished the integrity of the site. As a collective entity under Criterion C/3 the site is unable to convey significance to a historic period. Due to the combination of additions of new buildings, the alterations to historic era buildings, and the changes to the circulation and design of the site, the property no longer is capable of conveying an association to the mid-twentieth century historic period, when the site was first developed for the purpose for which it is known. As a result of the Port Hueneme Light Station's 80-year development history, the complex displays multiple, incompatible architectural styles and does not present a unified design. Key elements related to the original site plan, landscaping, circulation patterns, massing, spatial relationships, materials, and fenestration patterns have been extensively altered resulting in the loss of the unifying design that would make the property appear as a single, cohesive complex.

Under Criterion C/3 the Port Hueneme Light Station and the buildings that comprise the overall site are not distinctive as a group of associated buildings or rise to the level to be individually significant. In addition, modifications over time have compromised this historic integrity individually and as a group to the extent that they cannot convey associative significance. Therefore, the Port Hueneme Light Station does not appear eligible under NRHP Criterion C or under Criterion 3 of the CRHR.

Criterion D/4: That have yielded, or may be likely to yield, information important in prehistory or history.

This report was limited to historical resources that are part of the built environment. Criterion D generally applies to archaeological resources but may apply to a built environment resource in instances where a resource may contain important information about such topics as construction techniques or human activity. This is unlikely to be true for the any of the historic era buildings in the Light Station. Therefore, the Lighthouse and associated Light Station buildings does not appear eligible as built environment resources under NRHP Criterion D or CRHR Criterion 4.

Integrity Discussion

The Port Hueneme Light Station, as a multi-component site, was analyzed against the seven aspects of integrity: location, design, setting, materials, workmanship, feeling, and association. The site retains its integrity of location, as it has not been relocated. The features reflecting the original design of the Keepers' Residences and Garages have been lost due to substantial alterations. Therefore, the overall integrity of design has been diminished. The integrity of setting has been diminished due to continued development since the period of significance, 1941. The landscaping, circulation patterns, and the addition of a large modern metal clad shed between the Port Hueneme Lighthouse and the Keepers' Residences and Garages, inhibits the site from conveying a united, collective history. Therefore, the integrity of setting as a whole has been lost.

The original materials on the Lighthouse appear to be intact and therefore this building retains integrity of materials and workmanship. The remaining historic era buildings, the Keepers' Residences, Garages, and the Barracks/Mess Hall have all undergone alterations since their construction, and they have a diminished integrity of materials and workmanship. The buildings, as a collection, no longer conveys its original association. Therefore, the integrity of feeling has been lost. While the Port Hueneme Light Station is associated with the development of import-export trade in Southern California, the site's overall lack of integrity, diminishes the sites ability to convey historic association. The Port Hueneme Light Station, as an associated district, lacks integrity as a whole (Photograph 6).

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Appendix B Preparers' Qualifications

Sarah Corder, MFA

HISTORIC BUILT ENIRONMENT LEAD

Sarah Corder (*SARE-uh COR-der; she/her*) is an architectural historian with 17 years' experience throughout the United States in all elements of cultural resources management, including project management, intensive-level field investigations, architectural history studies, and historical significance evaluations in consideration of the California Register of Historical Resources (CRHR), the National Register of Historic Places (NRHP), and local-level evaluation criteria. Ms. Corder has conducted hundreds of historical resource evaluations and developed detailed historic context statements for a multitude of property types and architectural styles, including private residential, commercial, industrial, educational, and agricultural properties. She has also provided expertise on numerous projects requiring conformance with the Secretary of the Interior's Standards for the Treatment of Historic Properties.

Ms. Corder meets the Secretary of the Interior's Professional Qualification Standards for both Architectural History and History. She has experience preparing environmental compliance documentation in support of projects that fall under the California Environmental Quality Act (CEQA)/National Environmental Policy Act (NEPA), and Sections 106 and 110 of the National Historic Preservation Act.

Project Experience Santa Barbara Specific Experience

University of California, Santa Barbara, California. Dudek was retained by the University of California, Santa Barbara (UCSB) to complete a Phase I built environment Historical Resources Technical Report (HRTR) for the Building 7045, Devereux Gymnasium renovation project located on UCSB West Campus. The Mid-Century Modern building was constructed in 1971 to serve as a gymnasium for the Devereaux School. The purpose of this HRTR is to determine if the Project has the potential to affect historic properties pursuant to Section 106 or would impact any historical resources pursuant to CEQA. The Project is also subject to review under Public Resources Code (PRC) Sections 5024 and 5024.5 for state-owned resources. Responsibilities included project management, archival research, client management, SHPO consultation, and quality assurance/quality control (QA/QC) of all project deliverables. (2021-present)

HSSR, Confidential Residential Project, Confidential Client, Santa Barbara, California. Dudek was retained by a private construction company to prepare a Historic Structures/Site Report (HSSR) for a Spanish colonial revival estate built in the 1920s located in Santa Barbara, California. Dudek conducted archival research and an intensive-level pedestrian survey of the property for historic built environment resources. Dudek conducted archival research and an intensive-level survey of the property for historic built environment resources. As part of this study, Dudek prepared a Phase 1 HSSR for the property that included a historic context statement and significance evaluation and a Phase 2 HSSR that provided a detailed impacts analysis and Secretary of the Interior's standards conformance review. Responsibilities included project management, primary authorship of



Education
Savannah College of Art and Design
MFA, Historic
Preservation, 2004
Bridgewater College
BA, History, 2002
Professional Affiliations
National Trust for
Historic Preservation
Los Angeles Conservancy
California Preservation
Foundation
Society for Architectural
Historians



the report, archival research, evaluation of the property, field work, presentation at Historic Landmarks Commission meetings, design guidance to the construction company and architecture firm, and preparation of an Secretary of the Interior's standards conformance review of the design of the proposed garage. (2018–2020)

HSSR, Confidential Development Project, Confidential Client, Santa Barbara, California. Dudek was retained by a private construction company to prepare a HSSR for a Mid-Century Modern military facility built in the 1950s located in Santa Barbara, California. Dudek conducted archival research and an intensive-level survey of the property for historic built environment resources. As part of this study, Dudek prepared a Phase 1 HSSR for the property that included a historic context statement and significance evaluation and a Phase 2 HSSR that provided a detailed impacts analysis and Secretary of the Interior's standards conformance review. Responsibilities included project management, primary authorship of the report, archival research, evaluation of the property, field work, SHPO consultation, and design guidance. (2019–present)

Integrity Assessment and Comparative Analysis for Confidential Education Project, Confidential Client, Santa Barbara, California. Dudek prepared a memorandum that provides a comparative analysis and detailed account of alterations made to a confidential educational property located in the City of Santa Barbara, California. This analysis was designed to facilitate future significance evaluations with regard to the property's physical integrity and architectural merit. Responsibilities included project management, field survey, archival research, and preparation of the technical memorandum. (2019-2020)

HSSR for the Arroyo Burro Open Space Park Project, City of Santa Barbara, California. Dudek was retained by the City of Santa Barbara to prepare an updated HSSR for the Arroyo Burrow Open Space Park located within the City of Santa Barbara. The city provided Dudek with previously prepared studies of the project area, which were synthesized as part of the updated study. In addition, Dudek conducted supplemental archival research on the property and conducted an updated intensive-level survey of the property for both archaeological and historic built environment resources. Responsibilities included archival research and co-authorship of the report. (2018)

Historical Resource Evaluation Report for the Figueroa Division Courthouse, Judicial Council of California, City of Santa Barbara, California. Dudek was retained by the Judicial Council of California (JCC) to prepare an evaluation of the Figueroa Division Courthouse building, located at 118 East Figueroa Street in the City of Santa Barbara, California. The Figueroa Division Courthouse was found not eligible for designation under all applicable criteria. Responsibilities included co-authorship of the technical report and archival research. (2017)

Other Relevant Experience

Coronado Citywide Historic Resources Inventory and Historic Context Statement, City of Coronado, California.

Dudek is currently in the process of preparing a historic context statement and historic resources inventory survey for all properties at least 50 years old within City of Coronado limits. Following current professional methodology standards and procedures developed by the California Office of Historic Preservation and the National Park Service, Dudek developed a detailed historic context statement for the City that identifies and discusses the important themes, patterns of development, property types, and architectural styles prevalent throughout the City. Dudek also conducted a reconnaissance-level survey of all properties within City limits that are at least 50 years old to identify individual properties and groupings of properties (i.e., historic districts) with potential for historical significance under City Criterion C (properties that possess distinctive characteristics of an architectural style; are valuable for the study of a type, period, or method of construction; and have not been substantially altered). This document also developed registration requirements for resource evaluation that are specific to Coronado, in consideration of both historical significance and integrity requirements. Served as the project manager, principal architectural historian, and co-author of the report. Also led and conducted reconnaissance and intensive-level surveys and provided QA/QC for all project deliverables. (2019–Present)

Adrienne Donovan Boyd, MSHP

ARCHITECTURAL HISTORIAN

Adrienne Donovan-Boyd (*AY-dree-en DON-uh-vin BOID*; *she/her*) is an architectural historian with significant experience in Oregon and the Pacific Northwest. Ms. Donovan-Boyd has 15 years' experience in all elements of cultural resources management, including intensive- and reconnaissance-level field investigations, architectural history studies, and historical significance evaluations for compliance projects, the National Register of Historic Places (NRHP), and local landmark designations. She is a very skilled researcher; adept at evaluation of historic properties, and an experienced author of historical resources evaluation reports, findings of effect documentation for Sections 106 and 110 of the National Historic Preservation Act, historic context statements, and management plans for historic properties. Ms. Donovan-Boyd meets the Secretary of the Interior's Professional Qualification Standards for architectural history.

Ms. Donovan-Boyd has completed numerous projects for Port related facilities. Her recent work at the Port of Portland has focused on completing a survey of the Port's berths along the Columbia and Willamette Rivers. Additionally, Mrs. Donovan Boyd has completed HABS level documentation of the Cap Arago Lighthouse in Coos Bay, Oregon.

Relevant Project Experience Port and Harbor Facilities

Cultural Resources Investigations, Port of Portland 10-Year Pile Maintenance Project, Multnomah County, Oregon. Served as architectural historian for the proposed Port of Portland's 10-Year Pile Maintenance Project on five properties along the Columbia and Willamette Rivers as part of the USACE permitting process under Section 106. The investigations involved taking inventory of and evaluating 9 berths as part of the project. Evaluated the identified resources for the NRHP and co-authored the report. (2022-present)



Education

University of Oregon MS, Historic Preservation, 2009

Portland State University BA, Community Development, 2006

Certifications

Oregon Department of Transportation: Qualified Cultural Resources Consultant

National Safety Council First Aid/CPR/AED Certification, 2019

Professional Affiliations

National Trust for Historic Preservation Portland Architectural Heritage Center Oregon Historical Society

Mitigation Display, Port of Portland, Native Peoples and Historic Hangars Display, Multnomah County, Oregon. Served as architectural historian for the Port of Portland's mitigation responsibilities under Section 106 of the National Preservation Act for adverse effects as a result of the demolition of two airplane hangars at the Portland International Airport. Researched and created content for the display and guided the design process. (2021-present)

Cultural Resources Investigations, Mouth of the Columbia River South Jetty Rehabilitation Project, Clatsop County, Oregon. Served as architectural historian for the proposed U.S. Army Corps of Engineers (ACOE) South Jetty rehabilitation within Fort Stevens State Park. The investigations involved taking inventory of and evaluating the South Jetty and historic trails system. Evaluated the identified resources for the NRHP and co-authored the report. (2018)



Cultural Resources Services, United States Army Core of Engineers (USACE) Master Planning Indefinite

Delivery/Indefinite Quantity, Portland District, Oregon. Served as architectural historian for the ACOE Portland

District's Master Plan and integrated Environmental Assessment for the Mid-Columbia (Bonneville, The Dalles,
John Day, and Willow Creek) and Rogue River (Lost Creek, Elk Creek, and Applegate) basin regions. Attended
project meetings, conducted site visit reconnaissance surveys within the Lost Creek Project, and prepared the
historic properties management plan for the Lost Creek Project. (2018)

Lower Snake River Programmatic Environmental Impact Statement; United States Army Core of Engineers (USACE); Washington, Oregon, and Idaho. Researched and reported on historic built environment resources for the cultural resource sections for a programmatic Environmental Impact Statement related to the ACOE sediment management plan. The project area includes the Lower Snake River and four associated sub-basins: Clearwater River, Salmon River, Grande Ronde River, and Hells Canyon Reach of the Snake River. Made eligibility recommendation and co-authored the report. (2014)

Cape Arago Lighthouse, Historic American Buildings Survey Documentation, Coos Bay, Oregon. Assisted in the completion of Historic American Buildings (HABS)-level documentation of the Cape Arago Lighthouse, (HABS) No. OR-189. Assisted with site documentation, site and building description; measured drawings; and co-authored the report. (2008)

Energy

Cultural Resources Inventory for the BPA's Olympia–Grand Coulee No. 1 Insulator Replacement Phase 4 Project, Pierce and King Counties, Washington; 2020–Present. Architectural Historian for the cultural resources inventory for BPA's 50-mile-long project to replace insulators between Cleveland and Sunnyside, Washington. So far, we have conducted background research and prepared a literature review report. Historic context, methods, and results of the survey will be compiled into a technical report to DAHP and BPA standards, which will include NRHP eligibility evaluations and management recommendations for any identified resources.

Cultural Resources Inventory for the BPA's Spring Creek–Wine Country No. 1 Impairment and Insulator Replacement Project, Klickitat and Yakima Counties, Washington; 2020–2021. Architectural Historian for the cultural resources inventory for BPA's 33-mile-long project to remove impairments and replace insulators, located between Cleveland and Sunnyside, Washington. Conducted background research and prepared applicable historic context for the report, recorded 4 new historic built-environment resources, prepared a technical report to DAHP and BPA standards, including NRHP eligibility evaluations and management recommendations for identified resources.

Class III Inventory and Cultural Resources Report, Confidential Client, Nevada. Served on a multidisciplinary team to complete a Class III Cultural Resources Inventory for an energy related development. Contributed to archival research and co-authored the report, including the historic context section, significance evaluations, and recommendations. The project proposed that the historic period buildings remaining were not eligible for the NRHP. (2020)

Built Environment Inventory and Evaluation Report, Confidential Client, California. Served as an architectural historian to complete a Built Environment Inventory and Evaluation for an energy related development. Contributed to archival research and co-authored the report, including the historic context section, significance evaluations, and recommendations. The project proposed that several of the historic period buildings remaining were eligible for the NRHP. (2021)

Kathryn Haley, MA

HISTORIC BUILT ENVIRONMENT LEAD

Kathryn Haley (KATH-rin HAY-lee; she/her) is a historic built environment resource specialist/architectural historian with 19 years' professional experience in historic/cultural resource management. Ms. Haley has worked on a wide variety of projects involving historic research, field inventory, and site assessment conducted for compliance with Section 106 of the National Historic Preservation Act (NHPA), National Environmental Policy Act (NEPA), and California Environmental Quality Act (CEQA). Ms. Haley specializes in evaluating properties for listing in the California Register of Historical Resources (CRHR); the National Register of Historic Places (NRHP). She has evaluated a wide variety of built environment resources throughout California, including water management structures (levees, canals, dams, and ditches), buildings (residential, industrial, and commercial), and linear resources (railroad alignments, roads, and bridges). She specializes in managing large-scale surveys of built environment resources, including historic district evaluations. She has prepared numerous Historic Resources Evaluation Reports (HRERs) and Historic Property Survey Reports (HPSRs) for the California Department of Transportation (Caltrans). Ms. Haley also worked on the San Jose to Merced section and Central Valley Wye section of the California High-Speed Rail Project, where she led the built environment survey, conducted property-specific research, prepared the Draft Historic Architectural Survey Report (HASR) and co-authored the environmental section for cultural resources.



Education
California State University,
Sacramento MA,
Public History, 2004
California State University,
Sacramento BA,
History, 2001
Professional Affiliations
California Council for the

California Council for the Promotion of History (former Treasurer) California Preservation Foundation

She meets the Secretary of the Interior's Professional Qualification Standards for historian and architectural historian. Ms. Haley has also assisted in preparation of Historic Properties Inspection Reports (condition assessments) under the direction of the Naval Facilities Engineering Command (NAVFAC) in accordance with Section 106 and Section 110 of the NHPA. Moreover, Ms. Haley has served as project manager, coordinator, historian, and researcher for a wide variety of projects. She is also experienced in the preparation of Historic American Building Survey (HABS), Historic American Engineering Record (HAER), and Historic American Landscape Survey (HALS) documents, as well as the preparation for National Register nominations.

Dudek Project Experience

Historic Resources Compliance Report for the Crowther Sewer Pipeline Project, City of Placentia, Orange County, California. The City of Placentia proposes to upsize the existing sewer pipeline under Crowther Avenue, Placentia Avenue, and Orangethorpe Avenue by constructing a completely independent pipeline parallel to the existing pipeline, which would be capped and left in place once the new pipeline is completed. All cultural resources work was conducted according to Caltrans guidelines for compliance with CEQA. Provided QA/QC for the Historic Resources Compliance Report. (In progress)

The Keiser Avenue Reconstruction Project, City of Rohnert Park, Sonoma County, California. The City of Rohnert Park retained Dudek to prepare an HRER for the proposed Keiser Avenue Reconstruction project, which proposed the demolition of a residential property within the project area limits, located at 5040 Snyder Lane. Served as lead



architectural historian for the project and co-authored the HRER. Preparation of the report entailed extensive archival research; the composition of an appropriate historic context focused on the history of Rohnert Park; evaluation of the built features of the property within the framework of NRHP, CRHP, and local designation requirements; and the preparation of accompanying Department of Parks and Recreation (DPR) 523 forms. (2019)

Bidwell and El Rancho Verde Parks Master Plan, Cities of Hayward and Union City, Alameda County, California. Dudek was retained to prepare a cultural resources technical report for the Bidwell and El Rancho Verde Parks Master Plan project located in Alameda County. Co-authored the cultural resources technical report and provided QA/QC. Preparation of the technical report entailed archival building development research in local repositories and the

composition of an appropriate historic context focused on the history of Hayward and the development of Post-war residential communities in the Bay Area, exterior survey fieldwork of the resources, and historical significance evaluations for the resources in consideration of NRHP, CRHP, and local designation requirements. (2020)

Gonzaga Wind and Transmission Line Project, Pacheco State Park, California. As principal architectural history investigator, Ms. Haley prepared the technical report sections related to built environment for CEQA (State Parks) and Section 106 (Bureau of Reclamation). Included evaluation of Pacheco Ranch Historical District components and analysis for a PG&E transmission line and substation (2020). All work has received SHPO concurrence.

California State University, Chico, Master Plan EIR, City of Chico, Butte County, California. Served as lead architectural historian and co-author of the cultural resources technical study prepared in support of the California State University (CSU) Chico Master Plan EIR. Her role in the preparation of the study included the required exterior survey of campus and university farm buildings and in some cases, interior survey fieldwork involving all buildings and structures on campus over 45 years of age scheduled for demolition and/or substantial alteration as part of Phase 1 and 2 of the proposed Master Plan. This project also entailed extensive archival research and the preparation of historic context covering the development of the CSU system and the CSU Chico campus, and the preparation of significance evaluations and accompanying DPR forms for each resource. (2019-2020)

Feather River CEQA/NEPA Compliance, Mitigation for Adverse Effects to the Sutter Butte Canal, Sutter Butte Flood Control Agency, Butte and Sutter Counties, California. As built environment lead, worked with ACOE to establish efficient and appropriate mitigation for the burial of the Sutter Butte Canal Haselbusch Headgate, which was determined eligible for listing in the NRHP and CRHR as part of the cultural resources inventory and evaluation efforts for this project. To mitigate the adverse effect to the resource, an interpretative program was established in consultation with ACOE, SHPO, and Sutter Butte Flood Control Agency. Led the effort to produce an interpretive brochure and exhibit that explained the history of the Sutter Butte Canal Haselbusch Headgate. The brochures were distributed to local libraries and archives in Sutter and Butte Counties. The exhibit is part of the Butte County Historical Museum in Oroville, California. (2016)

Department of General Services Historical Resource Evaluation for the California Highway Patrol and Department of Motor Vehicles Site Broadway and 24th Street, Sacramento, California. Served as lead architectural historian in preparation of an Historical Resources Technical Report for the State of California Department of General Services (DGS). As part of the planning process for proposed improvements to the site, the complex of historic-era buildings was evaluated to comply with PRC Section 5024(b). To comply with this regulation, DGS must submit to SHPO an inventory of all structures over 50 years of age under DGS jurisdiction that are listed in or that may be eligible for inclusion in the NRHP, or that may be eligible for registration as a California Historical Landmark (CHL). Found the Department of Motor Vehicles building eligible for listing in the NRHP/CRHR for its association with master architect Milton T. Pflueger. The California Highway Patrol complex was not found eligible as it did not meet any of the NRHP/CRHR significance criteria. (2008)

Fallin E. Steffen, MPS

ARCHITECTURAL HISTORIAN

Fallin Steffen (*FAL-in STEF-in; she/her*) is an Architectural Historian with 6 years' experience in historic preservation, architectural conservation, and cultural resource management in the Monterey Bay Area and Northern California. Ms. Steffen's professional experience encompasses a variety of projects for local agencies, private developers, and homeowners in both highly urbanized and rural areas, including reconnaissance- and intensive-level surveys, preparation of resource-appropriate and city-wide historic contexts, and historical significance evaluations in consideration of the National Register of Historic Places (NRHP), California Register of Historic Resources (CRHR), and local designation criteria. Additionally, Ms. Steffen was appointed as a Commissioner to the Santa Cruz City Historic Preservation Commission assisting Santa Cruz City Staff with design review and conformance with the Secretary of the Interior Standards for proposed residential, commercial, and municipal projects involving historic properties.



B.A. History of Art & Visual

Santa Cruz, CA

Ms. Steffen meets the Secretary of the Interior's Professional Qualification
Standards for Architectural History. She is experienced with interdisciplinary
projects spanning private and public development, transportation, and water
infrastructure, and maintains experience forming educational sessions about the identification of and best
practices for the preservation of historic resources.

Relevant Dudek Project Experience

Graham Hill Water Treatment Plant Facilities Improvement Project, CEQA Compliance and USACE Permitting, City of Santa Cruz, California. Served as architectural historian, Ms. Steffen co-authored the Cultural Resources Inventory and Evaluation Report for the Graham Hill Water Treatment Plant Facilities Improvement Project. The purpose of the proposed project is to modernize the Graham Hill Water Treatment Plant by constructing numerous facility improvements to the existing plant in Santa Cruz County, California. As the project includes funding from the California Water Board and is therefore subject to the State Revolving Fund Program Environmental review requirements, the City of Santa Cruz requested the document comply with Section 106 of the NHPA of 1966 and CEQA, as federal permits may be needed and/or federal funding may be used for some of the undertakings in the future. Although the Graham Hill Water Treatment Plant had previously been evaluated under NRHP and CRHR Criteria by another historian in recent years, no local Criteria evaluation existed. Ms. Steffen co-authored all documentation related to the plant including the significance evaluation that recommended the plant not eligible for designation under NRHP, CRHR and local designation criteria. (September 2021 - ongoing)

El Dorado County Middle-Mile Fiber Project, US Department of Finance Permitting, Cool, Garden Valley, and Georgetown, El Dorado County, California. Served as architectural historian and co-author of the built environment inventory report. The purpose of the El Dorado County Middle-Mile Fiber Project is to build middle-mile fiber optic infrastructure within the three project areas of Cool, Garden Valley, and Georgetown in El Dorado County, California. The report was prepared in compliance with Section 106 and in support of the permitting process with the US Department of Finance. The report concluded that although there are previously recorded built



environment sites located in the APE, there is no potential to affect built environment buildings or structures through project construction or implementation. (September 2021)

Vista Woods Apartment Project, CEQA Compliance and HUD Permitting, Pinole, California. Served as architectural historian and co-authored the Built Environment Resources Inventory and Evaluation Report for the Vista Woods Apartment Project. The purpose of the project was to replace existing buildings on a development site comprising three parcels located in the City of Pinole, California with a new 4-story, 179-unit apartment complex providing affordable housing to seniors. As the project includes funding from the Department of Housing and Urban Development (HUD), the City of Pinole requested the document comply with Section 106 of the NHPA of 1966 and CEQA. Ms. Steffen authored the historical significance evaluation for 1106 San Pablo Avenue and its associated components. The significance evaluation determined that the property does not appear eligible for designation under NRHP, CRHR and local designation criteria. (August 2021)

The Delivery Station Building Project, Cultural Resources Inventory and Evaluation Report, San José, California. Served as architectural historian for the project, conducted fieldwork and co-authored the Cultural Resources Inventory and Evaluation Report. Dudek was retained by Kimley-Horn to complete a Historic Resources Evaluation for an industrial complex located in the City of San José, California. The purpose of the project is the replacement of the existing industrial complex with an approximate 94,325 square feet new warehouse building and site related improvements. The report entailed archival building development research in local repositories and the composition of an appropriate historic context focused on the history of San José, exterior survey fieldwork of the resources, and historical significance evaluations for the resources in consideration of NRHP, CRHP, and local designation requirements. As a result of the significance evaluation, the subject property does not appear eligible for listing in the NRHP, CRHR, or local inventory, due to a lack of significant architectural merit. (April 2021)

123 Independence Drive Mixed-Use Project, Department of Community Development, City of Menlo Park, California. Served as architectural historian and co-author of the Historical Resources Evaluation Report. The Sobrato Organization retained Dudek to prepare a cultural resources study in support of the 123 Independence Drive Mixed-Use Project located in the City of Menlo Park. The study included a pedestrian survey of the subject properties for buildings and structures over 45 years of age; building development and archival research for the identified properties located within the project site; recordation and evaluation of cultural resources identified within the study area for the NRHP, CRHR, and local eligibility criteria and integrity requirements; and an assessment of potential impacts to historical resources in conformance with the California Environmental Quality Act (CEQA) and all applicable local municipal code and planning documents. Ms. Steffen's efforts included exterior survey fieldwork of the resources and archival building development research in local repositories. (December 2020–Present)

The Sonrisa Solar Project, Tranquility, Fresno County, California. Served as architectural historian and author of the Historical Resources Evaluation Report for the Sonrisa Solar Project. The purpose of the project was to construct a 1,700-square-foot solar photovoltaic facility on multiple agricultural properties located in the unincorporated area of Tranquility, Fresno County. The Historic Resources Evaluation Report analyzed the potential project impacts on historical resources for five properties containing buildings and structures over 45-years of age. Ms. Steffen authored the historical significance evaluation for each property in conformance with CEQA Guidelines Section 15064.5 for historical resources and found that none of the properties were eligible for listing in the NRHP or CRHR, nor did the properties rise to the level of significance for local designation in Fresno County. (June 2020)

Appendix C Confidential Records Search Results

Appendix D

SHPO Concurrence Letter and Prior Site Documentation

OFFICE OF HISTORIC PRESERVATION

DEPARTMENT OF PARKS AND RECREATION 1725 23rd Street, Suite 100 SACRAMENTO, CA 95816-7100 (916) 445-7000 Fax: (916) 445-7053 calshpo@parks.ca.gov

June 05, 2013

www.ohp.parks.ca.gov

Reply in Reference To: USCG 2013 0520 0001

E.F. Wandelt. Chief Office of Environmental Management **United States Coast Guard** 2100 Second Street SW, STOP 7901 Washington, DC 20593-7901

Re: Section 110 Consultation for National Register of Historic Places Eligibility Determination for Port Hueneme Light, Ventura County

Dear Chief Wandelt:

Thank you for your 14 May 2013 letter regarding the United States Coast Guard's (USCG) efforts to comply with Section 110 of the National Historic Preservation Act of 1966. The USCG is requesting my concurrence with their determination that the Port Hueneme Light (a.k.a. Point Hueneme), constructed in 1941, is eligible for National Register of Historic Places inclusion under criteria A and C at the local level of significance. This request is being submitted under the USCG's Light Stations in the United States multiple property listing. After reviewing the information provided by the USCG, I concur with this determination.

Thank you for seeking my comments and considering historic properties as part of your project planning. If you have any questions or concerns, please contact Ed Carroll of my staff at (916) 445-7006 or at email at Ed.Carroll@parks.ca.gov.

Sincerely,

Carol Roland-Nawi PhD

State Historic Preservation Officer

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P1. Other Identifier: Po	ort Hueneme Light Station				
*P2. Location: ☐ Not for	Publication	*a. County Ventura			
	d. Attach a Location Map as necess Oxnard Date 1949, photor				
c. Address Port of H	lueneme, Oxnard Harbor District	City Port Hueneme Zip 93044	_		
d. UTM: (Give more than	one for large and/or linear resource	es) Zone 11 ; 296244 mE/ 3780433 mN	I .		
	(e.g., parcel #, directions to resour				
9		Hueneme harbor entrance. By foot or automobile, trav			
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		cally the Lighthouse is open to the public the third Satisfies with proper authorities is necessary prior to a			
visitation day.	to verify), otherwise coordinate	ion with proper authorities is necessary prior to a	proposec		
	esource and its major elements. Include	design, materials condition, alterations, size, setting and boundaries	s)		
The United States Coast	Guard (USCG) Port Hueneme I	ight Station grounds are located at the southern side o	f Port o		
		he grounds encompass an approximately five-acre			
		a 1938 to 1964. Historically, the light station groun			
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		e USCG facility officially became known as the Port I art of the property transferred from the USCG to the U			
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P5a. Photo or Drawing (Photo	o required for buildings, structures and of		thouse;		
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		PAR Environmental Servi	ces, Inc.		
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		*P10. Survey Type: (Descri			
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	ster of Historic Places Evaluation	of Port Hueneme Light Station, Ventura County,			
California.	The state of the s	DIC	D :		
	Location Map District Record Linear Feature	□ Continuation Sheet □ Building, Structure and Object Record □ Milling Station Record □ Rock Art Record □ Rock Art Record			
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P3a.

Prior to the construction of the extant lighthouse/fog station in 1940, the light station included the previous 1874 wood-framed lighthouse with incorporated keepers' quarters, a temporary fog signal building, the circa 1938 keepers' quarters (two houses and a garage), an artesian well and pump house. The 1874 lighthouse was barged across the harbor in February 1940 and was razed only a few years later. By 1958, the property included the new lighthouse/fog station, the circa 1938 keepers' quarters, a wood-framed barracks/mess hall, another single-story wood-framed keepers' quarters (north of the barracks), a small wood-framed garage, pump house (the electrical vault by 1960), pressure tank, paint locker, radio mast, and a United States Navy winch house (with living quarters). The additional keepers' quarters (a house built circa 1927), small garage (circa 1927) and possibly the barracks and a radio building were moved to this location in 1940s from the USCG Radio Station that was about 1,000 feet to the east; the radio station buildings were probably moved due to WWII military use of the eastern end of the reservation.

Between 1961 and 1962 additional keepers' quarters were constructed (two houses and a garage) and the circa 1927 house, paint locker and radio building were removed. By the 1960s, the property had a separate fog signal structure located to the western side of the Navy's winch house; this fog signal was removed in the late 1990s and replaced with the extant metal signal that is in the same location. The electrical vault was removed after 1973 and the circa 1927 garage was removed after 1980.

At present the approximately five-acre area includes the 1940 lighthouse/fog station, the 1939 and 1962 keepers' quarters (including garages), heavily modified barracks building circa 1950, modified circa 1950s Navy winch house, and several structures built less than 35 years ago by the Navy and subsequent tenants, such as the Channel Islands Marine Resource Institute (CIMRI) and Stellar Biotech (formerly called ABLAB). The modern buildings include metal-clad warehouses and a "test bed" house built in the late 1970s or early 1980s by the Navy for solar studies. The access road that enters the light station area and ends at the lighthouse/fog station as a cul-de-sac was in place over 50 years ago. The center of the cul-de-sac originally included a flagpole; the flagpole was removed at an unknown date. The following text further describes the extant buildings constructed during USCG ownership of the property. Field descriptions of the structures are supplemented by available historic architectural plans and correspondence with USCG, City of Port Hueneme and property tenants.

Port Hueneme Lighthouse and Fog Station

This Art Modern-style reinforced concrete structure was built by USCG in 1940 and was first lit in 1941. The single-story fog station portion measures approximate 46 feet east-west by 26 feet north-south by 14 feet, six inches high and the square lighthouse tower measures 13 feet, seven inches square by about 48 feet high (to the tip of the lantern room's conical roof). The tower is centrally set at the north side of the building with half of its square footprint inside of the fog station and half extending outside of the station. The building was repainted in the 1990s. The red paint on the windows, lantern room and railings is probably not an original color used on the otherwise white building. A concrete walkway extends around all sides of the building; patches of grass are set between the walkway and the building.

The building rests on a six-inch-thick concrete slab that is supported by a one-foot-thick by two-foot, six-inch-high concrete perimeter wall foundation. Supports at the four corners of the fog station portion of the building consist of on five-foot-square by two-foot-high footings and the lighthouse tower corner columns are set on five-foot, six-inch-square by two-foot, six-inch-high footings. The support columns and pilasters at the fog station's south side are further supported from beneath by approximately one-foot-diameter concrete pilings.

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P3a.

The exterior of the concrete fog station and lighthouse structure is surfaced with stucco. The perimeter walls of the fog station and tower are about seven inches thick and the columns at its four corners and the south wall are about 16 feet, five inches tall. The columns are typically two feet, six inches square (with a chamfered interior corner), each with an approximately three-foot, six-inch-high pedestal, a two-foot-square by one-foot-high finial and one-foot-wide wings that are about one foot, four inches shorter than the column. The comer columns of the lighthouse tower are similar in design to those of the fog station. Each tower column measures two feet, six inches square by about 45 feet high and includes a pedestal (same height as fog station columns), a tiered finial (bottom tier has same measurement as fog station finial and top tier measures about one foot, seven inches square by one foot high), and wings (same as fog station). The extant 300-mm emergency light was fastened to the southwest tower column in 1972.

The exterior of the building has one doorway on the first floor that is located on the north side of the lighthouse tower. This doorway included a paneled wood double door. The double door was removed during 1990s renovation work and a modern aluminum framed glass door with sidelights was set into the doorway. Two wall-mounted light fixtures flank the doorway. All but one of the window openings on the building have original multi-paned metal sash windows. The window directly above the north side doorway originally had a multi-paned metal sash window; however, this window was removed during the 1990s renovations and replaced with a single pane fixed window with print that reads "POINT HUENEME LIGHTHOUSE/ESTABLISHED 1874/CURRENT LENS INSTALLED 1874/PRESENT TOWER BUILT 1940." Attached to the area above this fixed window is an approximately one-foot-diameter bronze USCG plaque.

Original exterior elements that were removed from the building's walls by the 1990s include: a fog horn (with Type "F" diaphone) that was attached to the south side of the tower, a steel ladder that extended up the south side of the tower, and a steel ladder that extended up the west side of the fog station.

The parapeted roof over the single-story fog station is flat reinforced concrete supported from the interior with steel I-beam ceiling joists and crossbeams. The cylindrical lantern room and surrounding deck is at the top of the lighthouse tower. The deck (as well as the interior of the lantern room) has a concrete slab floor. Metal railings extend between the finials of the tower columns. The original railings were one-and-one-quarter-inch-diameter metal pipe with a top and mid-height rails. The original railings were removed during the 1990s renovations and replaced with new metal railings that include more horizontal rails for safety. The lantern room walls are constructed of steel including the crisscross sash of the glazing at the upper half of the room. The arched steel door (with upper glazing) provides access to the deck. The conical roof of the lantern room is steel. The metal ball (with pointed finial) at the top of the lantern room roof is a vent/heat dispersing device.

The extant interior wall surfaces of the fog station and lighthouse have textured, painted surfacing and many spaces include modern rubber baseboards. The original and extant flooring for all spaces is concrete slab. Pilasters at the south and east walls of the first floor (fog station) are reinforced with steel I-beams. Interior partition walls of the first level (except for those of the lighthouse tower) are constructed of one-foot-square by four-inch-deep structural terracotta tiles. Ceiling heights are 12 feet at the first and second levels, ten feet, six inches at the third level, and ten feet, two inches at the fourth level (lantern room, from floor to exposed center of roof). Wrought iron drainpipes, two-inch-diameter from the Lantern Room deck and three-inch pipes from the fog station roof, extend vertically inside of the building and exit to the exterior at the lower portions of the fog station and lighthouse tower. Extant lighting inside of the structure are modern fluorescent fixtures that were install in the 1970s or later.

The original plan for the first level of the building included the Entry, Compressor Room (entered from the Entry), Toilet Room and Tool Room (entered from Compressor Room), Store Room (entered from Compressor Room), Radio Telephone Room (entered from Store Room). Today, the layout of the first level is the same; however, either the uses of the rooms have change or spaces have been modified.

Walter English Charles

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P3a.

The Entry is within the first level of the lighthouse tower and is essentially in its original condition. It measures ten feet, six inches square in plan and includes a concrete slab floor and the original L-shaped concrete stairway (with mid-landing) to the second level of the lighthouse. The stairs are two feet, five inches wide with eight-and-one-half-inch treads and seven-and-one-half-inch risers. The original one-and-one-quarter-inch-diameter pipe metal stair railings (with two horizontal rails) were removed during 1990s renovations and were replaced with new metal railings with more horizontal rails for safety. The extant five-foot-wide opening between the Entry and Compressor Room is original. The Compressor Room is L-shaped with a maximum north-south measurement of about 25 feet and a maximum east-west measurement of about 26 feet, six inches. This room originally included air receivers at the northeast corner, an electric power panel on the east wall, and a Sullivan motor compressor and a Fairbanks-Morse & Co. engine compressor at the east end of the room (south of the air receivers). Sometime between 1962 and 1966 a wall was added dividing the Compressor Room into two spaces – a compressor/generator room to the east and an office to the west; there was a door between these two spaces. By the 1990s, the 1960s dividing wall and all fog station equipment were removed from this space. The room is now used as an exhibition space.

The original Toilet Room measured five feet, five inches north-south by four feet, four inches east-west and the original Tool Room measured six feet, eight inches north-south by four feet, four inches east-west. Both of these rooms have lowered ceilings giving them eight-foot ceiling heights. Access to both rooms was through two-foot, one-quarter-inch-wide paneled wood doors set to the east side of the rooms. During the 1990s renovations the original doors were removed and the separated wall between the Toilet and Tool rooms was removed. A new separating wall was installed to increase the size of the Toilet Room (to bring it to present ADA standards) and, therefore, decrease the size of the original Tool Room. Wider modern doors were installed to access the Toilet and Tool Rooms. The Tool Room door is now at the north wall of the small space instead of the east wall. Original Toilet Room fixtures were removed in the 1990s. All existing surface finishes and ADA-standard toilet and sink in the Toilet Room date to the 1990s.

The Store Room measures approximately 17 feet, six inches north-south by nine feet, six inches east-west. Originally, this space included a wooden workbench at the west wall. Sometime between 1962 and 1964, the Store Room was converted into a watch room; the workbench was removed and radio beacon equipment (set onto a false floor) was added to the southeast section of the room. The original wood door between this room and the Compressor Room was removed by the 1990s. The Radio Telephone Room measures approximately 15 feet, six inches east-west by five feet north-south. The original door to this room was a two-foot, six-inch-wide paneled wood door (with upper glazing); from the early 1960s to the present this room has been used for storage.

The second and third levels of the lighthouse tower retain their original concrete flooring. Original architectural plans do not depict the extant wall and doorway/door at the top of the stairway that extends between the first and second level; the railing was removed and the wall and door were probably added during the 1990s renovations. The concrete stairway between the second and third levels has the same measurements and modern railing as the Entry Room stairway. The access from the third level to the lantern room is an original quarter-spiral steel ladder with checkered floor plate treads and one-and-one-quarter-inch-diameter pipe hand railings.

The interior of the cylindrical Lantern Room at the top of the tower measures approximately seven feet in diameter and includes concrete flooring and steel walls below window level. A steel handbar is attached to the lantern room wall at the top of the ladder access into the room. There are four heat vents set into the lantern room wall; the vents have seven-inch-diameter iron caps that screw toward the wall to stop ventilation and unscrew for ventilation. Above the lantern room windows are iron hooks that reportedly held some type of blinds to block the sun when necessary. Centered within the Lantern Room is the Fresnel lens. This lens (with clockworks) was removed from the original Point Hueneme Lighthouse and reinstalled in this room in 1939-1940. A metal portion of the lens structure reads "Barbier & Benard, Constructeurs Paris 1897 BB/111." In early years, the lens weight had to be manually cranked two times a day. The lens is largely intact; however, the bottom plate has been replaced, the pendulum and the cog were removed, a modern float bearing was installed, and two lens panels were removed by vandals.

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P3a.

1939 Keepers' Quarters

Houses. The two identical 1939 Ranch-style houses were each built at a cost of \$11,600 (USCG 1973). The overall measurements of each single-story, wood-framed building are 46 feet, 10 inches east-west by 30 feet, 4 inches north-south by approximately 16 feet high. The walls are framed with 2 by 4-inch (nominal dimensioned) lumber. The exterior is surfaced with stucco. The gabled roofing is surfaced with terracotta Spanish (Mission) tiles. The roofing over the front and back entry areas is not depicted on original plans but was probably an addition during the original construction; these roofs are shed-roofed extensions of the main gable roof, the front porch roof supported by simple square-cut wood posts and the back porch roof supported by decoratively cut bracing. Three terracotta tile roof vents, each three inches in diameter, are at all gable ends. There is a brick exterior fireplace chimney (with plaster-washed surface) at the east end of each house and a brick interior chimney (with a stucco exterior surface) that extends from the kitchen. Original plans depict the houses as having copper gutters and downspouts; the extant gutters may be original, but the extant downspouts appear to be modern plastic or metal replacements.

Original windows appear to have been multi-pane fixed and casement windows (probably metal sash); these windows were removed and replaced with aluminum slider windows on both houses. The original doors appear to have been wood, the front door with a single square pane of glass (front by a metal grille) and the back door being paneled with a glazed upper panel. The original front doors on both houses have been removed and replaced with solid flush wood doors. At least one of the houses appears to include its original paneled back door. The back door is accessed from a two-riser concrete stoop.

The houses each have a reinforced concrete crawlspace foundation with 2 by 10-inch (nominal dimension) lumber floor joists above that are spaced 16 inches on center. The floor joist system includes wooden cross bridging. The foundation walls are 8 inches thick on 14-inch-wide concrete footings and include metal-screened vents. There is a screened two-foot-wide crawlspace access door at the back (north) side of each house. Concrete slab foundations are under each building's brick chimneys. There is an approximately 10-foot-square by 7-foot-high basement storage space at the northwest quadrant of the house that is accessed from a 10-riser concrete stairway with approximately 2-inch-diameter pipe metal railings. The storage room is entered from a paneled wood door (with upper glazing) and includes a wood sash window and concrete slab floor with a central drain.

The interior of each house originally included the following 10 spaces (each listed with its approximate north-south and then east-west measurements): a five-foot by five-foot entry vestibule (with a coat closet); 18-foot by 13-foot, six-inch living room; 11-foot by seven-foot dining alcove; 11 foot by 11-foot kitchen; three-foot, eight-inch by 23-foot hallway (with two closets); nine-foot by six-foot laundry room (with closet); 11-foot by seven-foot bathroom; and three bedrooms (each with a closet). The bedroom closest to the entry vestibule measured about 10 feet by 11 feet and the adjacent bedroom measures about 10 feet, and the bedroom adjacent to the bathroom measured about 10 feet, six inches by 13 feet. The ceiling heights are the same for all spaces at eight feet, six inches.

The western 1939 house is presently vacant. Its original floor plan is still evident and much of the original half-round trim remains. The original coat closet walls and door were removed, making the front entry area larger. The original arched openings between the living room, dining area and front entry are infilled; however, the infilling is inset so that original arch forms are still apparent. Original paneled doors still exist at the western end of the house. The original door between the living room and hallway has been removed and presently the doorway has no door. The doorway from hall to laundry area is a modification. The door between the dining and kitchen removed and not replaces. There is a modern Dutch-style door between kitchen and laundry room. All kitchen-related furnishings and fixtures have been removed in recent years; wooden water heater closet in the room may have been part of the 1963 renovation. The original laundry room closet was removed and the floor is surfaced with modern linoleum tiles. Affixed to the east laundry room wall are two Gamewell fire alarm/power boxes, and two inset metal switch boxes (one produced by The American Electric Switch Corp., Minerva, Ohio). The wall-mounted ironing board still remains.

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The bathroom retains its 1960s renovation design; the ceiling light fixture, SanFresh-brand liquid soap dispenser and toilet seat cover dispenser, both attached to the walls, appear less than 20 years old. The remaining rooms have modern carpeting on the floor, some with rubber baseboards. The ceiling light fixture hoods in the hallway may be part of the original 25-watt fixtures and the laundry room's ceiling light fixture may be original. All other original light fixtures (mostly 100-watt) have been removed and replaced with modern fluorescent ceiling fixtures.

The eastern 1939 house is now divided into two rentable spaces. The eastern half of the building was occupied during the August 2003 field visit and could not be accessed; this area includes the original kitchen, dining and living spaces. The original coat closet doorway is infilled and its north wall removed. The laundry room closet has been removed; however one of its shelf areas remains. The wall-mounted ironing board remains in the laundry room. Doors inside of this house include original paneled doors and replacement flush wood doors. The southwest bedroom's closet and the linen closet (at the west end of the hall) were combined into one large hallway closet; the doorway to the former bedroom closet is infilled. The closets of the two adjacent bedrooms were removed to increase the size of western of the two rooms.

Garage. The garage was built contemporaneously with the 1939 houses at a cost of \$2,300.00 (USCG 2003). The building has an overall measurement of 20 feet north-south by 44 feet east-west by about 12 feet high and is set on a concrete slab foundation. It is framed with 2 by 4-inch (nominal dimension) lumber for the walls and roof and 2 by 6-inch (nominal dimension) lumber for the ceiling joists. The central portion of the building has a roof that is slightly higher than the wings at the east and west ends. It has stucco-surfaced exterior walls and composition shingle-surfaced gabled roofing, which are the original surfacing types used on the building. According to original plans the building included wood sash, double-hung, eight-over-eight windows, wood pedestrian doors, paneled wooden double-doors (each with nine-light glazing) for the central garage bays, pentagonal wood louvered roof vents, and redwood roof gutters.

Today, the windows are typically replaced with aluminum slider or double-hung windows or have been infilled and stuccoed over, the original doorway at the south side include modern metal or wood doors, and the garage bay openings at the north side are infilled, stucco over and include aluminum slider windows. One nine-pane wood sash window on the south side may be original. The roof gutters may be original. The extant roof vents are rectangular and may be modern replacements.

The interior of the building originally included two central garage spaces (each 12 feet wide) with a storage wing at each end that measured 10 feet east-west by 18 feet north-south. The central garage areas had ceilings that are open to the roof framing and the storage wings have eight-foot finished ceiling heights. The wall between the garage and storage area at each side of the building included a door. Finished walls and ceilings were surfaced with tongue-and-groove lumber. Today the interior includes modifications for use as office/laboratory space.

A symmetrical concrete walkway system was incorporated into the site plan of the 1939 keepers' quarters (around the houses and garage). The walkways generally were two feet wide; however, there were wider concrete walks between the houses and the garage. Portions of the walkway system still exist, although several sections have been removed or have deteriorated. There had also been a concrete walk that extended from the southwest corner of the symmetrical walkway system to the lighthouse; this walk has been completed removed, its path largely overtaken by a modern warehouse used by CIMRI. Palm trees are planted to the east and west sides of the houses. There is a modern chain-link fenced area at the south side of the building with modern four-foot square wooden shed within. Two moveable metal storage structures (modern) are set between the garage and the western 1939 house. By circa 1950 there was a children's swing set to the south of the 1939 houses (Twohy and Mattson ca. 1950); this structure was removed at an unknown date. Around 1958, concrete block walls, four to seven feet high, were added to provide more privacy with the north yard area between the houses and garage; these walls were removed sometime after 1972.

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P3a.

1961 Keepers' Quarters

Houses. These single-story wood-framed Ranch-style buildings are similarly designed; however, the eastern house is bigger, largely to include two additional bedrooms. Both have concrete crawlspace foundations, stucco siding, composition shingle-surfaced gabled roofing, original two-over-two wood sash windows, wood front and back doors, and louvered wood triangular roof vents. The front (south side) entry porch on both houses is shed-roofed (extending from the main gabled roof) that is supported by simple square-cut posts. The smaller house includes the original louvered wooden decorative shutter at its front (south) side; the shutters were removed from the larger house at an unknown date. Each includes an interior brick furnace chimney. The original exterior paint scheme on both was tan with tan and green trim. The small house has a modern wood-frame shed-roofed overhang (with corrugated plastic roof surfacing) that protects equipment installed by the present occupants. A ceramic tile-surfaced table, with stuccoed arched supports and a metal sink, is not original to the large house and appears to be an addition made less than 25 years ago.

The smaller house, built at a cost of \$17,000, is rectangular and measures 27 feet, four inches north-south by 42 feet, eight inches east-west. The original floor plan included halls, a kitchen, dining area, living room, utility room, furnace room, bathroom, and two bedrooms (each with closet space). The larger house, built at a cost of \$22,000, is L-shaped with and overall measurement of 35 feet, four inches north-south by 55 feet, four inches east-west (USCG 1973). This larger house has all the same spaces as the small house, plus two more bedrooms (one with its own bathroom). The interior of each has sheet-rocked walls and originally all floors were surfaced with vinyl asbestos tiles, except for bathrooms and furnaces rooms. The bathrooms include one-inch ceramic tile flooring and four-inch ceramic tile wainscoting. The furnace room in each building was not surfaced. Bathroom windows obscured glass windows for privacy. The furnace rooms have fire doors.

Original room paint color schemes for the houses had all ceilings painted white and the living room, dining room and halls painted a peach color. The kitchens were painted white and utility rooms ivory. The small house had its front bedroom painted blue and the back bedroom painted green. The larger unit had the northernmost (master) bedroom painted blue, the adjacent bedroom to the south painted green, the southeast corner room painted peach and the westernmost bedroom painted yellow. The main bathroom of the small house was painted blue and the main bathroom of the large house was painted green; both had coordinating tile-work. The larger house's master bedroom bathroom is painted blue with coordinating tilework. Today, all walls are painted white.

The extant interior of the smaller house follows the original floor plan; however the opening between the dining room and living room was infilled and a door added. The bathroom has the original tilework and the bathtub; the toilet and wall mount sink may be replacements, but are in the original fixture locations. The halls and utility room have nine-inch-square vinyl tiles and the rest of the rooms have modern carpeting. The closet doors in the hall and in one of the bedrooms have been removed. All original kitchen utilities have been removed. All doors are flush wood and are probably original. The wood baseboards and door/window surrounds may be original. An original spindled wood screen in the living room has been removed. The larger house's interior has been reworked. The flooring is covered with modern carpeting or linoleum and most rooms have ceiling mounted, two-tube fluorescent light fixtures. The original spindled wood screen in the living room has been removed. No original kitchen fixtures/furnishing remain.

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Garage. This garage was built contemporaneously with the 1961 houses at a cost of \$2,900.00 (USCG 2003). It has an overall measurement of 20 feet north-south by 40 feet east-west by about 12 feet high and is set on a concrete slab foundation. The design of the building is similar to the 1939 garage; however several original elements, such as doors and windows, were 1960s types. It is framed with two by four lumber for the walls and two by six lumber for the rafters and ceiling joists. The central portion of the building has a roof that is slightly higher than the wings at the east and west ends. It has stucco-surfaced exterior walls and composition shingle-surfaced gabled roofing, which are the original surfacing types used on the building. According to original plans the building included wood sash, double-hung, two-over-two windows, wood pedestrian doors, and overhead garage bay doors, and triangular wood louvered roof vents. Today, the original windows are still in place; however, the pedestrian doors on the south side appear to be modern replacement wood doors and the garage bay doors on the north side are infilled, surfaced with plywood and include fixed wood sash windows. The galvanized pipe guard posts at the north side are original and flank the former garage door areas.

The interior of the building originally included two central garage spaces (each 12 feet wide) with a storage wing at each end that measured 8 feet east-west by 16 feet north-south. The height from finished floor to the ceiling joists is eight feet. The wall between the garage and storage area at each side of the building included a door. Finished walls and ceilings are surfaced with plywood. Today the interior includes modifications for use as office/laboratory space.

A concrete walkway system was incorporated into the site plan of the 1961 keepers' quarters (houses and garage) and was designed similarly to that of the 1939 keepers' quarters to the west. The walkways generally were two feet wide. Much of the walkway system still exists, although sections have been removed or have deteriorated. The 1939 and 1961 walkway systems are connected. Trees, including palms, are planted to the east and/or west side of the houses. A large bush is planted at the north and south sides of the west (two-bedroom) house. The two 1961 houses (and associate surrounding land) are separated from each other by chain-link fencing; a two-story house (test bed/solar studies building) that was built by the US Navy in the 1970s is located within the same fenced area as the west (two-bedroom) house.

Barracks

The rectangular, single-story (circa 1950s) barracks building has a concrete crawlspace foundation. The crawlspace walls are eight-inch-thick with 18-inch-wide continuous footings. Typically, there is a 2 by 10-inch floor joist system, with each joist generally spaced 16 inches on center. The walls are constructed of 2 by 4's. When initially set on this property, the building measured 28 feet east-west by 60 feet, six inches north-south and had wood shingle gabled roofing and siding. In 1964, USCG made a 31-foot, six-inch north-south by 28-foot east-west addition to north end of the building, adding three bedrooms, a laundry room and bag storage. It was during this modification the building that the original siding, roof surfacing, doors and wood sash windows were removed and replaced with stucco siding, composition roofing, new wood entry doors (with upper glazing), aluminum slider windows. Wood-framed screened porches entered from concrete stairs were added to the north and south side entries.

The floor plan of the barracks was also reconfigured in 1964 to include the extant central hallway; prior to this there was no distinctive continuous corridor element; a majority of original interior walls were removed and new partition walls set. By time the 1964 renovations were complete, the building included most rooms has asbestos tile flooring with rubber bases, a kitchen, mess/lounge, day room, eight bedrooms, washroom (bathroom), laundry room, bag storage and two general storage rooms. Most rooms had asbestos tile flooring with rubber bases and the bathroom has ceramic tile flooring and wainscoting Bathroom (mint-colored four-inch wainscot and shower stall tiles and multi-green-toned one-inch floor tiles. The mess hall/lounge and day room had wainscoting constructed of Philippine mahogany plywood. The bathroom and kitchen was outfitted with new fixtures and cabinetry. The bathroom was given new fixtures including the existing tiled shower stall, a double sink unit and mirrored medicine cabinets set into tile (one of the 1964 medicine cabinets still exists), two toilets with hollow metal partitions, and the extant urinal.

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The US Navy made a second full-width addition to the south end of the building in the late 1970s/early 1980s and then added to the east side of the building in the 1980s, giving the building a T-shaped footprint. Stellar Biotech has made other modifications from 1996 to the present, including the removal the 1980s east side addition, the addition of two modernized bathrooms within extant building, installation of a few aluminum double-hung windows, new fluorescent light fixtures, new interior wall and floor surfacing, such as linoleum and carpeting (McMullin 2003). The earlier bathroom, as renovated in 1964 still exists; however, the toilets and metal partitions were removed, new Formica sink countertop installed, and an original medicine cabinet was removed and replaced with a larger cabinet. The screened entry porches were removed and the concrete handicapped ramp at the north side of the building was installed in 1997 (McMullin 2003).

Navy Winch House

This small rectangular concrete building has a concrete slab foundation, concrete walls and a wood-framed shed roof with exposed rafter tails. The building does not appear on available architectural site plans until 1958. It may have been built during the late 1940s, reportedly after the start of World War II (McMullin 2003). There is a window opening on the west (harbor) side of the building that includes a metal grate cover; the hoist cable for the Navy's winch structure was drawn through this opening (McMullin 2003). The door on the north side is wood or metal with single-light glazing on its upper portion. There is a later-built stucco addition to the south side of the building that also has a wood-framed shed roof. Concrete pads are located to the north and east sides of the building. The concrete pad at the east side is shaded by a post-1972 flat-roofed overhang structure. Earlier plans show a small rectangular extension on the east side of the building, north of the extant overhang structure; this may have been the winch tender's quarters that was reportedly removed within the past 25 years (McMullin 2003).

The inside of the building originally included a centrally-set winch structure for the hoist cables. Stellar Biotech (formerly called ABLAB) has used the building since 1974 for their research. A wooden table is now set where the winch structure once was and aquaculture tanks are set along the walls. The interior of the south side addition is on a one-riser-high concrete slab; this space includes modern wooden shelving (Landers 2003; McMullin 2003).

Fog and Light Signals

The extant fog signal (to the west side of the Navy Winch House) was set on the property in 1998 to replace an earlier fog signal structure (Bullard 2003). The fog signal is about a 25-foot-high by one-foot, six-inch-diameter pole with the fog signal horn within a railing-enclosed deck above. The structure is set on a six-foot-square by one-foot-high concrete base. The extant metal pole light structure at the southern tip of the jetty was added in 1998 (Bullard 2003).

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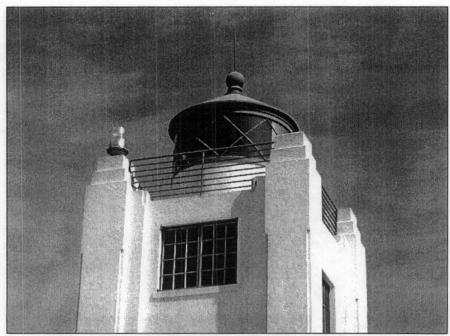
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1940 Lighthouse & Fog Station; View NW, 8/14/2003, file P1010257, Accession #03-2014-dig



1940 Lighthouse & Fog Station - Lantern Room and Added Light; View NW, 8/14/2003, file P1010260, Accession #03-2014-dig

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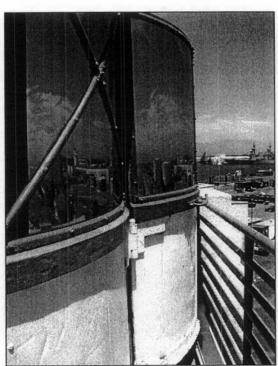
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Port Hueneme Light Station

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1940 Lighthouse & Fog Station - View of Lantern Room door; View N, 8/14/2003, file P1010302, Accession #03-2014-dig



1940 Lighthouse & Fog Station - Entry (looking toward Compressor Room; View S, 8/14/2003, file P1010272, Accession #03-2014-dig

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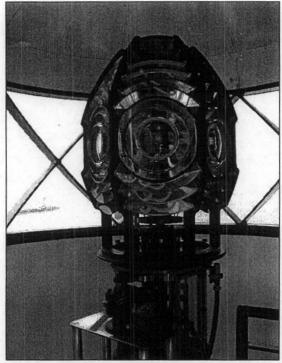
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1940 Lighthouse & Fog Station - Ladder to Lantern Room; View NW, 8/14/2003, file P1010281, Accession #03-2014-dig



1940 Lighthouse & Fog Station - Fresnel Lens; View NE, 8/14/2003, file P1010287, Accession #03-2014-dig

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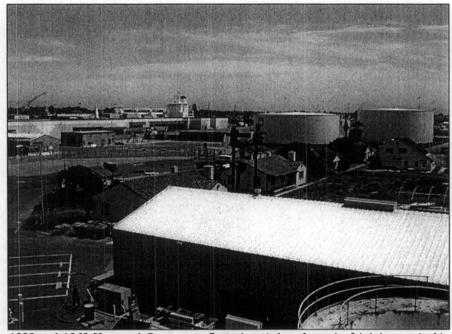
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1939 and 1962 Keepers' Quarters - Overview (taken from the Lighthouse deck); View NE, 8/14/2003, file P1010294, Accession #03-2014-dig



1939 Keepers' Quarters (West House); View NE, 8/14/2003, file P1010305, Accession #03-2014-dig

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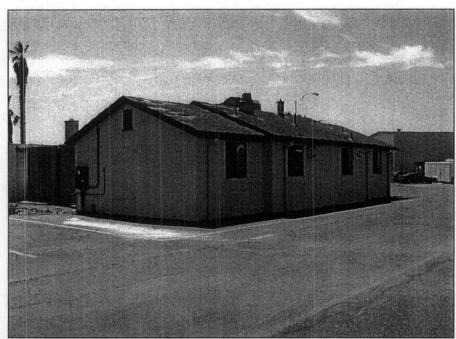
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1939 Keepers' Quarters (East House); View NW, 8/14/2003, file P1010307, Accession #03-2014-dig



1939 Garage (Note: Original window removed from east side and original garage door openings infilled on north side); View SW, 8/15/2003, file P1010329, Accession #03-2014-dig

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1961 Keepers' Quarters (West House - Two Bedroom); View NE, 8/14/2003, file P1010337, Accession #03-2014-dig



1961 Keepers' Quarters (East House - Four Bedroom); View NW, 8/14/2003, file P1010342, Accession #03-2014-dig

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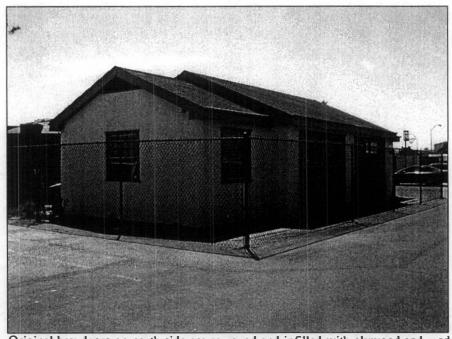
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1961 Garage (Note: Original bay doors on north side are removed and infilled with plywood and modern fixed windows); View SW, 8/15/2003, file P1010336, Accession #03-2014-dig



Barracks; View SW, 8/14/2003, file P1010271, Accession #03-2014-dig

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Navy Winch House (now houses aquaculture tanks); View SW, 8/14/2003, file P1010263, Accession #03-2014-dig



Modern Fog Signal; View SW, 8/14/2003, file P1010265, Accession #03-2014-dig

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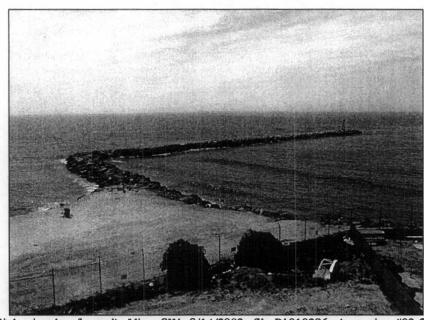
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Jetty (light signal at far end); View SW, 8/14/2003, file P1010296, Accession #03-2014-dig

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Port of Hueneme, Oxnard Harbor (land) District, PO Box 608 Port Hueneme, CA 93044

United States Coast Guard (lighthouse) USCG MLSPAC Coast Guard Island Alameda, CA

*P11. References:

Brown, G.

2003 Personal communication between Greg Brown, City of Port Hueneme, and Tracy Bakic, PAR Environmental Services, Inc. August 2003.

Bullard, D.

2003 Personal communication between David Bullard, USCG and Tracy Bakic, PAR Environmental Services, Inc. September 2003.

Landers, T.

2003 Personal communication between Troy Landers, Stellar Biotech, and Tracy Bakic, PAR Environmental Services, Inc. August 2003.

State of California - The Resources Agency
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*P11. References:

Marsh, C.

2003 Personal communication between Carol Marsh, Port Hueneme or Oxnard Sea Bee Museum Historian, and Tracy Bakic, PAR Environmental Services, Inc. August 2003

McMullin, J.

2003 Personal communication between John McMullin, Stellar Biotech, and Tracy Bakic, PAR Environmental Services, Inc. August 2003.

Twohy, L., and M. Mattson

ca. 1950 Picture posted at Port Hueneme Lighthouse. Taken from California Light Stations and Other Aids to Navigation, ca. 1950 by Twohy and Mattson.

United States Coast Guard

1973 Proceedings of a Board of Survey - CG Station, Port Hueneme. Survey No. 11-125-1973. Dated May 31, 1973. On file, U.S. Coast Guard Records Center, Alameda, California.

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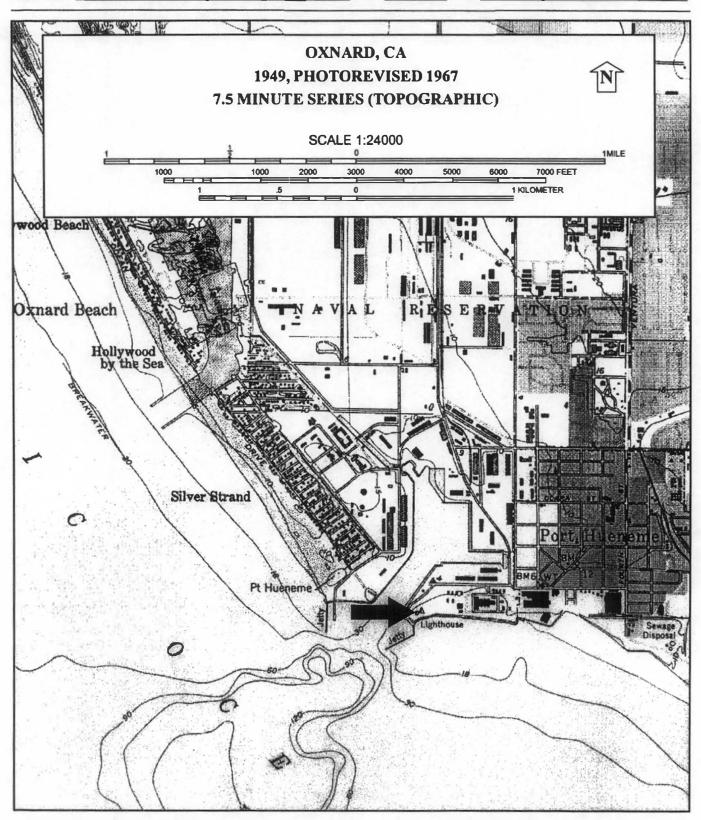
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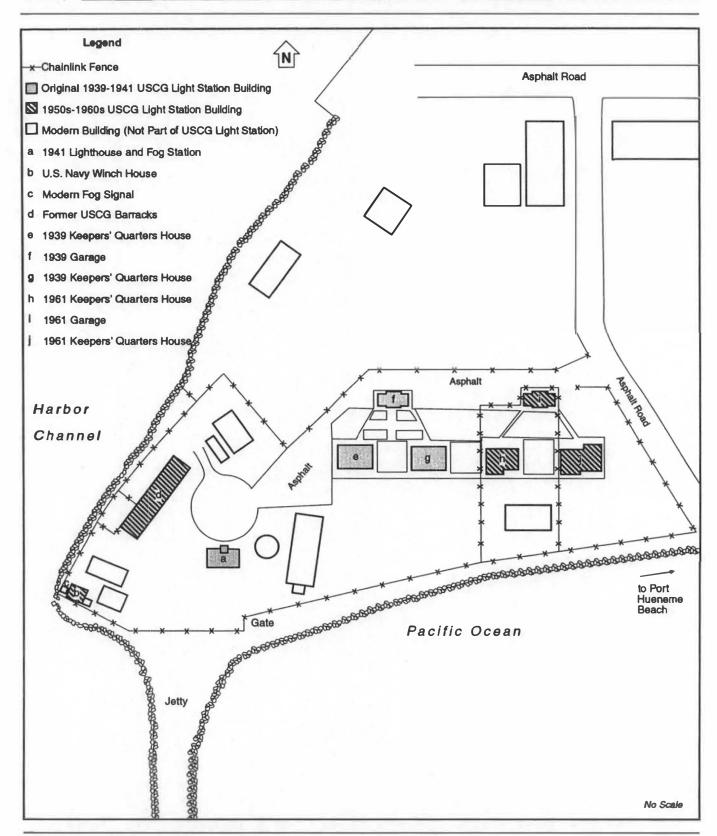
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State of California - The Resources Agency DEPARTMENT OF PARKS AND RECREATION SITE SKETCH MAP

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PAR ENVIRONMENTAL SERVICES, INC.

Cultural Resource Management ■ Biology ■ Environmental Planning

ESTABLISHED 1982

October 25 2005

South Central Coastal Information Center California State University, Fullerton Department of Anthropology 800 North State College Blvd. Fullerton, CA 92834-6846

RE: U.S. Coast Guard Lighthouse Project (PAR Ref: 03-2014)

To Whom It May Concern:

Par Environmental Services has prepared historical resources summaries for lighthouses owned by the U.S. Coast Guard. These summaries were prepared for the Coast Guard Due Diligence Audits and are based upon record search data. No additional survey was conducted and no new cultural forms were created as part of this project. The Coast Guard may transfer ownership of these properties in the future. In the summary text, "Project Area" refers to the remaining lighthouse reservation that the Coast Guard would be declaring as excess to the General Services Administration (GMA). Transfer of the lighthouses may not occur for several years due to Section 106 processes. We thought you might like a copy of the summaries for your files. Enclosed please find summaries for the Point Hueneme and Point Vicente facilities.

Sincerely,

PAR Environmental Services, Inc.

Vonica Molte

Monica Nolte

Associate Cultural Resource Specialist

cc: Mary Maniery (no attachments)

PORT HUENEME LIGHTHOUSE STATION SUMMARY

The Port Hueneme Lighthouse Station is located in Ventura County. It consists of a 52-foot-tall concrete Art Moderne style tower rising from a fog signal building (1941) that sits on property that has already been conveyed to the Oxnard Harbor District and a modern fog signal building (1972). The Port Hueneme Lighthouse has been determined eligible as part of a Multiple Property Listing of the National Register of Historic Places. The facility is in use as a navigational aid and actively managed by the Coast Guard. The station includes a fog signal building with attached lighthouse (1941) and a modern fog signal. The lighthouse is eligible under Criterion C as an excellent example of Art Moderne lighthouse design that reflects a construction style used for a number of twentieth century light stations. Its period of significance is 1941, its year of construction and activation.

A record search of the California Historic Resource Information System was conducted at the South Central Coastal Information Center (SCCIC) on September 10, 2003. Letters were also sent to appropriate Native American groups following the Native American Heritage Commission response.

The project area lies within the ethnographic territory of the Chumash Indians of California. The SCCIC data indicates that the project area occupies the site of the ethnographic village of *Wene 'me* and a previously recorded archaeological site, CA-VEN-663, surrounds the lighthouse. SCCIC records indicate that the site has been evaluated as not eligible for the National Register of Historic Places.

The Port Hueneme Light Station area presents the very low potential for prehistoric and historic archaeological resources. The buildings that the USCG proposes to sell are unlikely to contain prehistoric traces related to the inhabitants and their predecessors. Historical deposits are even less probable. Deposits may include both remains of daily life and activity and of construction methods and means.

POINT VICENTE LIGHT STATION SUMMARY

The Point Vicente Light Station is located in Los Angeles County near the City of Palos Verdes. The property consists of approximately 20 acres with Coast Guard improvements, including the light. The Point Vicente Light Station was listed on the National Register of Historic Places (NRHP) on September 22, 1977. The facility is in use as a navigational aid and actively managed by the Coast Guard. The station consists of the original 1926 concrete lighthouse and a fog signal building, a two-story keeper's quarters (Quarters C), two one-story keepers' quarters (Quarters A and B), two garages, a radio beacon, and an oil house. There is also an Operations and Barracks building constructed in 1968. The facility is listed in the NRHP under Criterion C for its classic Mission Revival architectural design with a period of significance of 1926, the year of its construction.

A record search of the California Historic Resource Information System was conducted by the South Central Coastal Information Center on September 10, 2003. Letters were also sent to appropriate Native American groups and California's Native American Heritage Commission. The response from the Gabrielino Tongva indicated that they do have concerns about the project area. An Archaeological Testing and Evaluation Report, dated September 10, 1991, was prepared for site CA-LAN-1735. The site was determined ineligible for the National Register on May 5, 1991. A cultural resource survey was performed on the property dated November 1997. All reports are on file with the Coast Guard Aids to Navigation Team Los Angeles/Long Beach.

The project area lies within the ethnographic territory of the Gabrielino, which included most of present-day Los Angeles and Orange counties, plus several offshore islands. The Gabrielino spoke a Cupan language in the Takic family, which is part of the Uto-Aztecan linguistic stock. Gabrielinos culture was heavily affected by Spanish missionary efforts long before systematic ethnographic studies could be conducted. Information about their material cultural and lifeways is very limited and largely from historical sources (Bean and Smith 1978:538).

The Point Vicente Light Station area appears to have the potential for prehistoric archaeological resources. The roughly 20-acre project area may contain prehistoric traces related to the inhabitants and their predecessors. Historical deposits are less probable and would likely be associated with the keepers' quarters. Deposits may include remains of daily life and activity, and remains related to construction methods and means.

Job No. 03-2014



PAR Environmental Services, Inc.

Biological

Cultural

Environmental Planning

Street Address: 1906 21st Street, Sacramento, CA 95814

Mailing Address: P.O. Box 160756, Sacramento, CA 95816-0756

Phone: 916-739-8356 Fax: 916-739-0626

TO South Central Coastal Information Date 10/24/05

Cente	er			
Califo Fuller		tate Ui	niversity, Atten	ntion Ms. Margaret Lopez
Depa	rtment of A	Anthropolog	RE:	Port Hueneme DPR. Forms
800 N	orth State	College B	vd.	
P. O.	Box 6846			
Fuller	ton, CA 92	2834-6846		
WE ARE S	ENDING Y	′OU <u></u> ✓ /	ATTACHED	
COPIES	DATE	NO.		DESCRIPTION
2			Primary and BSC	O forms
1			NRHP Report an	nd Nomination
		MITTED A	S CHECKED BELO	
	approval		_	As requested
✓ For	your use		_	For review and comment
Deer Ma 1				
Dear Ms. L			nonet DDD form	and National Desister new instinct for Dest
Hueneme.	accept the	evaluation	report, DPR form	and National Register nomination for Port
	call ma if y	iou bouo a	ugations	
Please	call file ii y	ou have q	Jestions.	
СОРҮ ТО	File	BHI	, M	
			SIGN	
				Cindy Baker

If enclosures are not as noted, kindly notify us at once.

Thank you and have a great day!

OMB No. 10024-0018

NPS Form 10-900 (Oct. 1990)

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES REGISTRATION FORM

1. Name of Property	
Historic name: Port Hueneme Lighthouse Other name/site number: Port Hueneme Lig	ght Station
2. Location	
Street & Number: Seaside Drive	not for publication
City/Town: City of Port Hueneme	vicinity
	CA County: Ventura Code: 0 Zip Code: 93044
3. State/Federal Agency Certification	
□ nomination □ request for determination National Register of Historic Places and meet opinion, the property □ meets □ does no significant □ nationally □ statewide □ lo	does not meet the National Register criteria. (See continuation sheet.)
4. National Park Service Certification	
I hereby certify that this property is:	
☐ entered in the National Register ☐ See continuation sheet.	
☐ determined eligible for the National Register ☐ See continuation sheet.	
☐ determined not eligible for National	
Register removed from the National Register other (explain):	SI CONTRACTOR OF THE PROPERTY
Signature of Keeper of Action	Date

OMB No. 10024-0018

NPS Form 10-900 (Oct. 1990)

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES REGISTRATION FORM

5. Classification				
Ownership of Property (check as many boxes as may apply) private public-local public-State public-Federal	Category of Property (check only one box) building(s) district site structure object	Number of Res Contributing 1	Noncontributing	buildings sites structures objects Total
Name of related multiple property list (Enter "N/A" if property is not part o			contributing resources nal Register	previously listed
Light Stations in the United State	es, Light Stations of Californ	nia None		
6. Function or Use				
Historic Functions (Enter categories from instructions) TRANSPORTATION/Maritime			ons ies from instructions) TION/Maritime	
Commerce		THAINGI GITTA	TIOTATION	
7. Description				
		Materials (Enter categori	es from instructions)	

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NATIONAL REGISTER OF HISTORIC PLACES REGISTRATION FORM

Narrative Description

(Describe the historic and current condition of the property on one or more continuation sheets.)

See continuation sheet

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NATIONAL REGISTER OF HISTORIC PLACES REGISTRATION FORM

8. Stateme	ent of Significance	
(Mark "x"	National Register Criteria in one or more boxes for the criteria qualifying ty for National Register listing.)	Areas of Significance (Enter categories from instructions)
X A	Property is associated with events that have made a significant contribution to the broad patterns of our history.	TRANSPORTATION MARITIME HISTORY COMMERCE
□в	Property is associated with the lives of persons significant in our past.	Period of Significance
⊠ c	Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.	1941 Significant Dates 1941 (illumination)
□ D	Property has yielded, or is likely to yield, information important in prehistory or history.	Significant Person (Complete if Criterion B is marked above) N/A
	in all the boxes that apply)	Cultural Affiliation
□ A	owned by a religious institution or used for religious purposes.	N/A
□в	removed from its original location.	Architect/Builder
С	a birthplace or grave.	United States Coast Guard, 11th District
□ D	a cemetery.	
□ E	a reconstructed building, object, or structure.	
□ ғ	a commemorative property.	
□ G	less than 50 years of age or achieved significance within the past 50 years.	continuation sheets.)
	Statement of Significance	Continuation Shocts.

9. Major Bibliographical References	
Bibliography (Cite the books, articles, and other sources used in preparing t	this form on one or more continuation sheets.)
Previous documentation on file (NPS):	Primary Location of Additional Data:
□ preliminary determination of individual listing (36 CFR 67) has been requested □ previously listed in the National Register □ previously determined eligible by the National Register □ designated a National Historic Landmark □ recorded by Historic American Buildings Survey # □ recorded by Historic American Engineering Record #	☐ State historic preservation office ☐ Other state agency ☐ Federal agency ☐ Local government ☐ University ☐ Other Name of Repository: City of Oxnard, United States Coast Guard, Alameda Island, Oxnard Sea Bee Museum
10. Geographical Data	
Acreage of Property	
UTM References (Place additional UTM references on a continuation sheet.) Zone Easting Northing 11 296244 3780433	
71 250244 3700433	☐ See continuation sheet
Verbal Boundary Description	
Lighthouse property includes building only.	
Boundary Justification	
This is the original location of the lighthouse.	
11. Form Prepared By	
Name/Title: Cindy L. Baker, Historian	
Organization: PAR ENVIRONMENTAL SERVICES, INC.	Date: October 16, 2003
Street & Number: 1906 21st Street	Telephone: (916)739-8356
City or Town: Sacramento State	e: <u>CA</u> ZIP: <u>95814</u>

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number	7	Page #	1	Property Name	Port Hueneme Lighthouse	
				· · · · · · · · · · · · · · · · · · ·		

ARCHITECTURAL DESCRIPTION

This Art Moderne-style reinforced concrete structure was built by USCG in 1940 and was first lit in 1941. The single-story fog station portion measures approximate 46 feet east-west by 26 feet north-south by 14 feet, six inches high and the square lighthouse tower rneasures 13 feet, seven inches square by about 48 feet high (to the tip of the lantern room's conical roof). The tower is centrally set at the north side of the building with half of its square footprint inside of the fog station and half extending outside of the station. The building was repainted in the 1990s. The red paint on the windows, lantern room and railings is probably not an original color used on the otherwise white building. A concrete walkway extends around all sides of the building; patches of grass are set between the walkway and the building.

The building rests on a six-inch-thick concrete slab that is supported by a one-foot-thick by two-foot, six-inch-high concrete perimeter wall foundation. Supports at the four corners of the fog station portion of the building rest on five-foot-square by two-foot-high footings and the lighthouse tower corner columns are on five-foot, six-inch-square by two-foot, six-inch-high footings. The support columns and pilasters at the fog station's south side are further supported from beneath by approximately one-foot-diameter concrete pilings.

The exterior of the concrete fog station and lighthouse structure is surfaced with stucco. The perimeter walls of the fog station and tower are about seven inches thick and the columns at its four corners and the south wall are about 16 feet, five inches tall. The columns are typically two feet, six inches square (with a chamfered interior corner), each with an approximately three-foot, six-inchhigh pedestal, a two-foot-square by one-foot-high finial and one-foot-wide wings that are about one foot, four inches shorter than the column. The corner columns of the lighthouse tower are similar in design to those of the fog station. Each tower column measures two feet, six inches square by about 45 feet high and includes a pedestal (same height as fog station columns), a tiered finial (bottom tier has same measurement as fog station finial and top tier measures about one foot, seven inches square by one foot high), and wings (same as fog station). The extant 300-mm emergency light was fastened to the southwest tower column in 1972.

The exterior of the building has one doorway on the first floor that is located on the north side of the lighthouse tower. This doorway included a paneled wood double door. The double door was removed during 1990s renovation work and a modern aluminum framed glass door with sidelights was set into the doorway. Two wall-mounted light fixtures flank the doorway. All but one of the window openings on the building have original multi-paned metal sash windows. The window directly above the north side doorway originally had a multi-paned metal sash window; however this window was removed during the 1990s renovations and replaced with a single pane fixed window with print that reads "POINT HUENEME LIGHTHOUSE/ESTABLISHED 1874/CURRENT LENS INSTALLED 1874/PRESENT TOWER BUILT 1940"; the lens installation date is incorrect and will probably be changed. Attached to the area above this fixed window is an approximately one-foot-diameter bronze USCG plaque. Original plans show a proposed plaque that was two feet, six inches in diameter; however this plaque was never installed. It is undetermined as to when the extant plaque was installed.

Original exterior elements that were removed from the building's walls by the 1990s include: a fog horn (with Type "F" diaphone) that was attached to the south side of the tower; a steel ladder that extended up the south side of the fog station.

The parapeted roof over the single-story fog station is a flat reinforced concrete supported from the interior with steel I-beam ceiling joists and crossbeams. The cylindrical lantern room and surrounding deck is at the top of the lighthouse tower. The deck (as well as the interior of the lantern room) has a concrete slab floor. Metal railings extend between the finials of the tower columns. The original railings were one-and-one-quarter-inch-diameter metal pipe with a top and mid-height rails. The original railings were removed during the 1990s renovations and replaced with new metal railings that include more horizontal rails for safety. The lantern room walls are constructed of steel including the crisscross sash of the glazing at the upper half of the room. The arched steel door

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NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number7 Page #2	Property Name Port Hueneme Lighthouse

(with upper glazing) provides access to the deck. The conical roof of the lantern room is steel. The metal ball (with pointed finial) at the top of the lantern room roof is a vent/heat dispersing device.

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NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number _	7	Page #	3 Property Name	Port Hueneme Lighthouse

The original and extant flooring for all spaces is concrete slab. Pilasters at the south and east walls of the first floor (fog station) are reinforced with steel I-beams. Interior partition walls of the first level (except for those of the lighthouse tower) are constructed of one-foot-square by four-inch-deep structural terracotta tiles. Ceiling heights are 12 feet at the first and second levels, 10 feet, six inches at the third level, and 10 feet, two inches at the fourth level (lantern room, from floor to exposed center of roof). Wrought iron drainpipes, two-inch diameter from the Lantern Room deck and three-inch pipes from the fog station roof, extend vertically inside of the building and exit to the exterior at lower portions of the fog station and lighthouse tower. Extant lighting inside of the structure are modern fluorescent fixtures that were install in the 1970s or later.

The original plan for the first level of the building included the Entry, Compressor Room (entered from the Entry), Toilet Room and Tool Room (entered from Compressor Room), Store Room (entered from Compressor Room), Radio Telephone Room (entered from Store Room). Today, the layout of the first level is the same; however, either the uses of the rooms have change or spaces have been modified.

The Entry is within the first level of the lighthouse tower and is essentially in its original condition. It measures 10 feet six inches square in plan and includes a concrete slab floor and the original L-shaped concrete stairway (with mid-landing) to the second level of the lighthouse. The stairs are two feet, five inches wide with eight-and-one-half-inch treads and seven-and-one-half-inch risers. The original one-and-one-quarter-inch-diameter pipe metal stair railings (with two horizontal rails) were removed during 1990s renovations and were replaced with new metal railings with more horizontal rails for safety. The extant five-foot-wide opening between the Entry and Compressor Room is original. The Compressor Room is L-shaped with a maximum north-south measurement of about 25 feet and a maximum east-west measurement of about 26 feet, six inches. This room originally included air receivers at the northeast corner, an electric power panel on the east wall, and a Sullivan motor compressor and a Fairbanks-Morse & Co. engine compressor at the east end of the room (south of the air receivers). Sometime between 1962 and 1966 a wall was added dividing the Compressor Room into two spaces – a compressor/generator room to the east and an office to the west; there was a door between these two spaces. By the 1990s, the 1960s dividing wall and all fog station equipment were removed from this space. The room is now used as an exhibition space.

The original Toilet Room measured five feet, five inches north-south by four feet, four inches east-west and the original Tool Room measured six feet, eight inches north-south by four feet, four inches east-west. Both of these rooms have lowered ceilings giving them eight-foot ceiling heights. Access to both rooms was through two-foot, one-quarter-inch-wide paneled wood doors set to the east side of the rooms. During the 1990s renovations the original doors were removed and the separated wall between the Toilet and Tool rooms was removed. A new separating wall was installed to increase the size of the Toilet room (to bring it to present ADA standards) and, therefore, decrease the size of the original Tool Room. Wider modern doors were installed to access the Toilet and Tool Rooms. The Tool Room door is now at the north wall of the small space instead of the east wall. Original Toilet Room fixtures were removed in the 1990s. All existing surface finishes and ADA-standard toilet and sink in the Toilet Room date to the 1990s.

The Store Room measures approximately 17 feet, six inches north-south by nine feet, six inches east-west. Originally, this space included a wooden workbench at the west wall. Sometime between 1962 and 1964, the Store Room converted into a watch room; the workbench was removed and radio beacon equipment (set onto a false floor) was added to the southeast section of the room. The original wood door between this room and the Compressor Room was removed by the 1990s. The Radio Telephone Room measures approximately 15 feet, six inches east-west by five feet north-south. The original door to this room Radio door was a two-foot, six-inch-wide paneled wood door (with upper glazing); from the early 1960s to the present this room has been used for storage.

The second and third levels of the lighthouse tower retain their original concrete flooring. Original architectural plans do not depict the extant wall and doorway/door at the top of the stairway that extends between the first and second level; the railing was removed and the wall and door were probably added during the 1990s renovations. The concrete stairway between the second and third levels has the same measurements and modern railing as the Entry Room stairway. The access from the third level to the lantern room is an original quarter-spiral steel ladder with checkered floor plate treads and one-and-one-quarter-inch-diameter pipe hand railings.

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NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number7	Page #4	Property Name Port Hueneme Lighthouse

The interior of the cylindrical Lantern Room at the top of the tower measures approximately seven feet in diameter and includes concrete flooring and steel walls below window level. A steel handbar is attached to the lantern room wall at the top of the ladder access into the room. There are four heat vents set into the lantern room wall; the vents have seven-inch-diameter iron caps that screw toward the wall to stop ventilation and unscrew for ventilation. Above the lantern room windows are iron hooks that reportedly held some type of blinds to block the sun when necessary. Centered within the Lantern Room is the Fresnel lens. This lens (with clockworks) was removed from the original Point Hueneme Lighthouse and reinstalled in this room in 1939-1940. A metal portion of the lens structure reads "Barbier & Benard, Constructeurs Paris 1897 BB/111". In early years, the lens weight has to be manually cranked two times a day. The lens is largely intact; however, the bottom plate has been replaced, the pendulum and the cog were removed, a modern float bearing was installed, and two lens panels were removed by vandals.

The extant fog signal (to the west side of the Navy Winch House) was set on the property in 1998 to replace an earlier fog signal structure (Bullard 2003). The fog signal is about a 25-foot-high by one-foot, six-inch-diameter pole with the fog signal horn within a railing-enclosed deck above. The structure is set on a six-foot-square by one-foot-high concrete base.

The Port Hueneme Light Station was constructed by the United States Coast Guard in 1940-1941 to replace the original 1874 Point Hueneme Light Station that provided an important navigational aid to the frequently fog-choked entrance to San Barbara Channel. The new lighthouse was part of the creation of Port Hueneme, the only deepwater port between Los Angeles and San Francisco. The lighthouse was essential to the development of the import-export economy of Southern California, and, as such, appear to meet Criterion A as being associated with an important development in local history. The lighthouse is an excellent representative example of the Art Moderne lighthouse design used by the Coast Guard during the 1930s and early 1940s and meets Criterion C as a unique structure. The lighthouse retains its integrity of location, materials, association, design, and workmanship, although its integrity of setting and feeling have been compromised by surrounding development since 1941, the lighthouse's date of completion and period of significance. A result, the lighthouse appears to be on historical resource and for Light Station of California eligible for listing on the National Register of Historic Places under the Multiple Property Forms for U. S. Lighthouses.

NPS Form 10-900-a

OMB Approval No. 1024-0018

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number7 Page #1 Proper	ty Name Port Hueneme Lighthouse
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ARCHITECTURAL DESCRIPTION

This Art Moderne-style reinforced concrete structure was built by USCG in 1940 and was first lit in 1941. The single-story fog station portion measures approximate 46 feet east-west by 26 feet north-south by 14 feet, six inches high and the square lighthouse tower measures 13 feet, seven inches square by about 48 feet high (to the tip of the lantern room's conical roof). The tower is centrally set at the north side of the building with half of its square footprint inside of the fog station and half extending outside of the station. The building was repainted in the 1990s. The red paint on the windows, lantern room and railings is probably not an original color used on the otherwise white building. A concrete walkway extends around all sides of the building; patches of grass are set between the walkway and the building.

The building rests on a six-inch-thick concrete slab that is supported by a one-foot-thick by two-foot, six-inch-high concrete perimeter wall foundation. Supports at the four corners of the fog station portion of the building rest on five-foot-square by two-foot-high footings and the lighthouse tower corner columns are on five-foot, six-inch-square by two-foot, six-inch-high footings. The support columns and pilasters at the fog station's south side are further supported from beneath by approximately one-foot-diameter concrete pilings.

The exterior of the concrete fog station and lighthouse structure is surfaced with stucco. The perimeter walls of the fog station and tower are about seven inches thick and the columns at its four corners and the south wall are about 16 feet, five inches tall. The columns are typically two feet, six inches square (with a chamfered interior corner), each with an approximately three-foot, six-inch-high pedestal, a two-foot-square by one-foot-high finial and one-foot-wide wings that are about one foot, four inches shorter than the column. The corner columns of the lighthouse tower are similar in design to those of the fog station. Each tower column measures two feet, six inches square by about 45 feet high and includes a pedestal (same height as fog station columns), a tiered finial (bottom tier has same measurement as fog station finial and top tier measures about one foot, seven inches square by one foot high), and wings (same as fog station). The extant 300-mm emergency light was fastened to the southwest tower column in 1972.

The exterior of the building has one doorway on the first floor that is located on the north side of the lighthouse tower. This doorway included a paneled wood double door. The double door was removed during 1990s renovation work and a modern aluminum framed glass door with sidelights was set into the doorway. Two wall-mounted light fixtures flank the doorway. All but one of the window openings on the building have original multi-paned metal sash windows. The window directly above the north side doorway originally had a multi-paned metal sash window; however this window was removed during the 1990s renovations and replaced with a single pane fixed window with print that reads "POINT HUENEME LIGHTHOUSE/ESTABLISHED 1874/CURRENT LENS INSTALLED 1874/PRESENT TOWER BUILT 1940"; the lens installation date is incorrect and will probably be changed. Attached to the area above this fixed window is an approximately one-foot-diameter bronze USCG plaque. Original plans show a proposed plaque that was two feet, six inches in diameter; however this plaque was never installed. It is undetermined as to when the extant plaque was installed.

Original exterior elements that were removed from the building's walls by the 1990s include: a fog horn (with Type "F" diaphone) that was attached to the south side of the tower; a steel ladder that extended up the south side of the tower; and a steel ladder that extended up the west side of the fog station.

The parapeted roof over the single-story fog station is a flat reinforced concrete supported from the interior with steel I-beam ceiling joists and crossbeams. The cylindrical lantern room and surrounding deck is at the top of the lighthouse tower. The deck (as well as the interior of the lantern room) has a concrete slab floor. Metal railings extend between the finials of the tower columns. The original railings were one-and-one-quarter-inch-diameter metal pipe with a top and mid-height rails. The original railings were removed during the 1990s renovations and replaced with new metal railings that include more horizontal rails for safety. The lantern room walls are constructed of steel including the crisscross sash of the glazing at the upper half of the room. The arched steel door

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Section number/ Page #2_	Property Name Port Hueneme Lighthouse	

(with upper glazing) provides access to the deck. The conical roof of the lantern room is steel. The metal ball (with pointed finial) at the top of the lantern room roof is a vent/heat dispersing device.

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NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section number7	Page #3	Property Name Port Hueneme Lighthouse

The original and extant flooring for all spaces is concrete slab. Pilasters at the south and east walls of the first floor (fog station) are reinforced with steel 1-beams. Interior partition walls of the first level (except for those of the lighthouse tower) are constructed of one-foot-square by four-inch-deep structural terracotta tiles. Ceiling heights are 12 feet at the first and second levels, 10 feet, six inches at the third level, and 10 feet, two inches at the fourth level (lantern room, from floor to exposed center of roof). Wrought iron drainpipes, two-inch diameter from the Lantern Room deck and three-inch pipes from the fog station roof, extend vertically inside of the building and exit to the exterior at lower portions of the fog station and lighthouse tower. Extant lighting inside of the structure are modern fluorescent fixtures that were install in the 1970s or later.

The original plan for the first level of the building included the Entry, Compressor Room (entered from the Entry), Toilet Room and Tool Room (entered from Compressor Room), Store Room (entered from Compressor Room), Radio Telephone Room (entered from Store Room). Today, the layout of the first level is the same; however, either the uses of the rooms have change or spaces have been modified.

The Entry is within the first level of the lighthouse tower and is essentially in its original condition. It measures 10 feet six inches square in plan and includes a concrete slab floor and the original L-shaped concrete stairway (with mid-landing) to the second level of the lighthouse. The stairs are two feet, five inches wide with eight-and-one-half-inch treads and seven-and-one-half-inch risers. The original one-and-one-quarter-inch-diameter pipe metal stair railings (with two horizontal rails) were removed during 1990s renovations and were replaced with new metal railings with more horizontal rails for safety. The extant five-foot-wide opening between the Entry and Compressor Room is original. The Compressor Room is L-shaped with a maximum north-south measurement of about 25 feet and a maximum east-west measurement of about 26 feet, six inches. This room originally included air receivers at the northeast corner, an electric power panel on the east wall, and a Sullivan motor compressor and a Fairbanks-Morse & Co. engine compressor at the east end of the room (south of the air receivers). Sometime between 1962 and 1966 a wall was added dividing the Compressor Room into two spaces – a compressor/generator room to the east and an office to the west; there was a door between these two spaces. By the 1990s, the 1960s dividing wall and all fog station equipment were removed from this space. The room is now used as an exhibition space.

The original Toilet Room measured five feet, five inches north-south by four feet, four inches east-west and the original Tool Room measured six feet, eight inches north-south by four feet, four inches east-west. Both of these rooms have lowered ceilings giving them eight-foot ceiling heights. Access to both rooms was through two-foot, one-quarter-inch-wide paneled wood doors set to the east side of the rooms. During the 1990s renovations the original doors were removed and the separated wall between the Toilet and Tool rooms was removed. A new separating wall was installed to increase the size of the Toilet room (to bring it to present ADA standards) and, therefore, decrease the size of the original Tool Room. Wider modern doors were installed to access the Toilet and Tool Rooms. The Tool Room door is now at the north wall of the small space instead of the east wall. Original Toilet Room fixtures were removed in the 1990s. All existing surface finishes and ADA-standard toilet and sink in the Toilet Room date to the 1990s.

The Store Room measures approximately 17 feet, six inches north-south by nine feet, six inches east-west. Originally, this space included a wooden workbench at the west wall. Sometime between 1962 and 1964, the Store Room converted into a watch room; the workbench was removed and radio beacon equipment (set onto a false floor) was added to the southeast section of the room. The original wood door between this room and the Compressor Room was removed by the 1990s. The Radio Telephone Room measures approximately 15 feet, six inches east-west by five feet north-south. The original door to this room Radio door was a two-foot, six-inch-wide paneled wood door (with upper glazing); from the early 1960s to the present this room has been used for storage.

The second and third levels of the lighthouse tower retain their original concrete flooring. Original architectural plans do not depict the extant wall and doorway/door at the top of the stairway that extends between the first and second level; the railing was removed and the wall and door were probably added during the 1990s renovations. The concrete stairway between the second and third levels has the same measurements and modern railing as the Entry Room stairway. The access from the third level to the lantern room is an original quarter-spiral steel ladder with checkered floor plate treads and one-and-one-quarter-inch-diameter pipe hand railings.

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The interior of the cylindrical Lantern Room at the top of the tower measures approximately seven feet in diameter and includes concrete flooring and steel walls below window level. A steel handbar is attached to the lantern room wall at the top of the ladder access into the room. There are four heat vents set into the lantern room wall; the vents have seven-inch-diameter iron caps that screw toward the wall to stop ventilation and unscrew for ventilation. Above the lantern room windows are iron hooks that reportedly held some type of blinds to block the sun when necessary. Centered within the Lantern Room is the Fresnel lens. This lens (with clockworks) was removed from the original Point Hueneme Lighthouse and reinstalled in this room in 1939-1940. A metal portion of the lens structure reads "Barbier & Benard, Constructeurs Paris 1897 BB/111". In early years, the lens weight has to be manually cranked two times a day. The lens is largely intact; however, the bottom plate has been replaced, the pendulum and the cog were removed, a modern float bearing was installed, and two lens panels were removed by vandals.

The extant fog signal (to the west side of the Navy Winch House) was set on the property in 1998 to replace an earlier fog signal structure (Bullard 2003). The fog signal is about a 25-foot-high by one-foot, six-inch-diameter pole with the fog signal horn within a railing-enclosed deck above. The structure is set on a six-foot-square by one-foot-high concrete base.

The Port Hueneme Light Station was constructed by the United States Coast Guard in 1940-1941 to replace the original 1874 Point Hueneme Light Station that provided an important navigational aid to the frequently fog-choked entrance to San Barbara Channel. The new lighthouse was part of the creation of Port Hueneme, the only deepwater port between Los Angeles and San Francisco. The lighthouse was essential to the development of the import-export economy of Southern California, and, as such, appear to meet Criterion A as being associated with an important development in local history. The lighthouse is an excellent representative example of the Art Moderne lighthouse design used by the Coast Guard during the 1930s and early 1940s and meets Criterion C as a unique structure. The lighthouse retains its integrity of location, materials, association, design, and workmanship, although its integrity of setting and feeling have been compromised by surrounding development since 1941, the lighthouse's date of completion and period of significance. A result, the lighthouse appears to be on historical resource and for Light Station of California eligible for listing on the National Register of Historic Places under the Multiple Property Forms for U. S. Lighthouses.

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INTRODUCTION

As long as there have been ships upon the seas, navigational aids have been part of the human endeavor. In the centuries before air travel, nations relied upon the safe passage of ships, including the United States. Congress passed the Lighthouse Act of 1789 to take responsibility for building and operating such aids along its coasts. Since then, the government has constructed over a thousand lighthouses, hundreds of fog signals and almost 200 floating light signals. The government created a specialized Lighthouse Board in 1852, which became the Bureau of Lighthouses in 1910. These early years make up the period of the Lighthouse Service, which merged with other federal maritime agencies in 1939 to establish the U.S. Coast Guard (United States Department of the Interior [USDI], National Park Service [NPS] 2002:2).

The United States Coast Guard (USCG) Port Hueneme Light Station grounds are located at the southern side of the Port Hueneme, Oxnard Harbor District basin entrance. The Port Hueneme Lighthouse is situated at the north side of the east entrance to the Santa Barbara Channel. The signal is important to navigation through the channel, which is typically fog-bound from July through October when inland temperatures rise. The port is the only deep water port between Los Angeles and San Francisco and is important for foreign trade. The lighthouse grounds encompass an approximately five-acre area that includes extant USCG-built structures dating from circa 1938 to 1964. Historically, the light station grounds were located at the west end of the USCG Point Hueneme Reservation. With the formation of the Oxnard Harbor District in 1937 and the opening of the Port of Hueneme in 1940, the USCG facility officially became known as the Port Hueneme Light Station. In the 1970s the USCG light station was part of property transferred from USCG to the US Navy. In 1997 it was part of 33 acres of Naval property transferred to Oxnard Harbor District. USCG has retained ownership of the lighthouse (Brown 2003; Marsh 2003).

HISTORICAL CONTEXT

The Santa Barbara Channel extends 63 miles along the southern California coast between Point Fermine (near San Pedro) and Point Hueneme on the north end. The channel is defined on the west and south by the San Miguel, Santa Cruz, Santa Rosa, and Anacapa islands, known collectively as the Channel Islands. Portuguese explorer Juan Rodriguez Cabrihlo was the first to sail the channel in the fall of 1542. In the following centuries, Spanish missionaries established a scattering along the coast, but the population remained low until the years following the California Gold Rush and statehood in 1849. From that year forward, the number of ships traveling the waters of the channel would continue to grow (Nelson and Nelson 1993:29).

The original Point Hueneme Lighthouse site was located on 16.14 acres of the Rancho El Rio de Santa Clara o La Colonia, purchased by the U.S. Lighthouse Service for \$17. The first lighthouse on the point was constructed in 1874 and was activated the same day as the Point Fermin Lighthouse to the south; December 15, 1874. These two Victorian-style lighthouses marked the entrances to the Santa Barbara Channel, an important shipping lane between the southern California coast and the Channel Islands. Eventually four lighthouses were established along the channel (Nelson and Nelson 1993:29, 31).

The Point Hueneme site included the keeper's dwelling, identical to those built at East Brother in Oakland, California and Point Adams, Oregon, in addition to that at Point Fermin mentioned earlier. Water for the site was drawn from artesian wells, but by 1882 the wells were impure and rainwater from the station's roofs was collected in a 10,000-gallon tank. In 1889, the original white flashing oil light on the lighthouse was changed to a fixed red light. In 1892, it was changed to an occulating white light. In 1899, the Service installed a revolving fourth order Fresnel lens made by Barbier and Benard in 1897 (which remains to the present day) (Nelson and Nelson 1993:32).

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In 1900, the Lighthouse Service purchased another adjacen	nt 30 acres of the El Rio de Santa Clara o La Colonia for \$2,000.	Of the

combined 46 acres at the Point Hueneme site, various parcels would be carved out and sold to private companies or transferred to the

Property Name Port Hueneme Lighthouse

Department of the Navy over the following century.

By 1922, the station consisted of the Lighthouse Service and a Navy Radio Station. The Lighthouse included the original lighthouse with keeper's dwelling. The structure had two sets of quarters to house the two lighthouse keepers and their families. In total, the dwelling had 1350 square feet of floor space comprising a total of eight rooms. The site also included a fog signal building, a

carpenter shop, two storehouses, a barn, a hollow tile oil house and a concrete oil house. The navy's radio compass station, established three years earlier, consisted of three additional buildings on a separate portion of the lighthouse reservation. In 1928, the

In 1925, the oil lamp in the lighthouse was replaced with an electric light and in 1933 an electric motor was installed at the lighthouse to eliminate the hand-winding of the light's clockwork (Nelson and Nelson 1993:33).

Naval Radio Compass Station was transferred to the Lighthouse Service (Lighthouse Service 1922).

In 1939, work began to create a deep water port was created near the site, which required dredging the entrance along the point. In the process, the original lighthouse had to be moved. A local yachting club purchased the lighthouse/keepers' quarters structure and moved it across the harbor, although it was later demolished. The lighthouse lantern room was removed from the building before the move and replaced in the new lighthouse under construction (Nelson and Nelson 1993:32). Port Hueneme, as it became known, remains the only deep water port between Los Angeles and San Francisco.

To replace the housing lost by the move of the lighthouse structure, the Coast Guard built two cottages for the keeper and assistant keeper in 1939. These structures were actually finished before the move. The two identical cottages were designed with roughly 1,230 square feet of interior space in each unit.

With the housing in place, the Coast Guard built the present lighthouse, which is a 48-foot-tall concrete tower rising from a one-story building. The focal plane is 52 feet above sea level and was lit with the original 1874 lantern and 1899 fourth order Fresnel lens operated by the original clockworks system. The light was activated in 1941. The tower is square and rises from the rectangular building below. The structure presents an Art Moderne architectural styling that was used at other Coast Guard lighthouses built during the period, most notably the Sentinel Island Lighthouse in Alaska (Nelson and Nelson 1993:32).

By 1958, the property included a mixture of USCG and Navy structures, including the new lighthouse/fog station, the 1939 keepers' quarters, a wood-framed barracks/mess hall, another single-story wood-framed keepers' quarters (north of the barracks), a small wood-framed garage, pump house (converted to an electrical vault by 1960), pressure tank, paint locker, radio mast, and a United States Navy winch house (with living quarters). The additional keeper's quarters (a house built circa 1927), small garage (circa 1927) and possibly the barracks and a radio building were moved to this location in 1940s from the USCG Radio Station that was about 1,000 feet to the east; the radio station buildings were probably moved due to World War II (WWII) military usage of the eastern end of the reservation.

Between 1961 and 1962 additional keepers' quarters were constructed (two houses and a garage) and the circa 1927 house, paint locker and radio building were removed. By the 1960s, the property had a separate fog signal structure located to the west side of the Navy's winch house. The electrical vault was removed after 1973 and the circa 1927 garage was removed after 1980. The fog signal was removed in the late 1990s and replaced with the extant metal signal that is in the same location.

The lighthouse was automated in 1972. As a result, onsite housing became unnecessary. The station was disestablished in 1973 when a new Coast Guard station was constructed at Channel Islands Harbor. Some of the land at Port Hueneme Light Station was then transferred to the Navy at that time.

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At present the approximately five-acre area (Figure 4) includes the 1940 lighthouse/fog station, the 1939 and 1962 keepers' quarters (including garages), heavily modified barracks building, modified circa 1950s Navy winch house, and several structures built less than 35 years ago by the Navy and subsequent tenants, such as Channel Islands Marine Resource Institute (CIMRI) and Stellar Biotech (formerly called ABLAB). The modern buildings include metal-clad warehouses and a "test bed" house built in the late 1970s or early 1980s by the Navy for solar studies. The access road that enters the light station area and ends at the lighthouse/fog station as a cul-de-sac was in place over 50 years ago. The center of the cul-de-sac originally included a flagpole; the flagpole was removed at an unknown date.

In 1999, the lantern room and window frames of the lighthouse were painted red during a refurbishing effort. The original lighthouse's fourth order Fresnel lens is still in use at the current Port Hueneme Lighthouse (Nelson and Nelson 1993:32). The fog signal structure uses the original single diaphone type fog signal. The Port Hueneme facility is part of the Eleventh Coast Guard District.

Significance and Integrity

The Port Hueneme Light Station was constructed by the United States Coast Guard in 1941 to replace the original 1874 Point Hueneme Light Station that provided an important navigational aid to the frequently fog-choked entrance to Santa Barbara Channel. The lighthouse was constructed as part of the creation of the Port Hueneme harbor, the only deep water port between Los Angeles and San Francisco. This port greatly enhanced the import-export economy of the region and the light was crucial to its successful operation. As a result, the lighthouse appears to meet Criterion A as a significant structure. The lighthouse is an excellent representative example of the Art Moderne lighthouse design used by the Coast Guard on the Pacific Coast during the 1930s and early 1940s and, is the only one of its kind in California; as such, it appears to meet Criterion C as a significant structure. The lighthouse retains its integrity of location, materials, association, design, and workmanship, although its integrity of setting and feeling have been compromised by surrounding development since 1941, the lighthouse's date of construction and period of significance. As a result, the lighthouse appears to be an historical resource eligible for listing in the National Register of Historic Places under the nationwide Multiple Property NRHP Form for U. S. Lighthouses and Multiple Property NRHP Form for Light Stations of California.

Alterations to the two 1939 keeper's quarters originally associated with the lighthouse have greatly compromised their integrity of design, materials, and workmanship. Nearby development has destroyed their integrity of setting and feeling from the time of their construction. As a result of this loss, the keepers' quarters do not appear to be eligible for listing on the National Register of Historic Places. Also, the fog signal structure is a modern building and not eligible for listing on the National Register.

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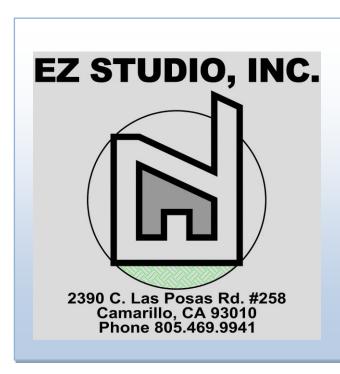
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Appendix E

Port Hueneme Light Station Structural Report



STRUCTURAL EVALUATION -

EXISTING RESIDENTIAL & SHOP STRUCTURE PORT OF HUENEME OXNARD HARBOR DISTRICT 333 PONOMA ST – PORT HUENEME, CA 93041



Date: July 1, 2022 Project No.: 22-09

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To Mr. K.J. May,

At your request, EZ Studio Inc. was obtained to perform a structural evaluation and assessment of the existing residential & shop building located within The Port of Hueneme, CA. The structures, which are the basis for this report, are located adjacent to the Port of Hueneme Light House. The site contains (6) single-story residential buildings and one two-story shop building, which were constructed by the California Coast Guard in the 1930's through the 1970's. The noted buildings were abandoned by the Coast Guard in the early 1980's and have not been used or occupied since. Our structural observation & evaluation is solely intended to provide an assessment of the existing structural conditions; deterioration, distress, and capacity for possibly moving the structures off site and relocate them.

We only observed those items of the existing structure that are readily accessible and visible, not requiring special equipment and demolition unless noted otherwise, and those items that are not covered by architectural finishes, waterproofing, paint, etc. We assume the structures materials and construction are satisfactory to the original design specifications. We assume the construction of the structure was done with conformance with current code and city requirements at the time it was built. We assume all necessary permits, fees, dues and city inspections were obtained and/or paid by the developer as required at the time of construction per the current standard of care for similar projects in the City of Port Hueneme, CA. Original design drawings were not available, provided or reviewed.

OBSERVATIONS

On March 24, 2022, Eduardo Zarate was on site to observe the existing buildings and site conditions. Our scope for the observation was to ascertain from visual information, the current structural conditions of the noted (6) buildings. The buildings are grouped into four different types. Bldg. 404 is unique and is a two-story building with concrete slab on grade foundation, exterior wall wood siding and composition roofing. Bldg. 400 & 408 are similar residential buildings, and both are single-story with concrete slab on grade foundation, exterior stucco lath walls and 'S' tile roofing and a brick fireplace located near the center of the building. Bldg. 406 & 422 are similar residential buildings, and both are single-story with concrete slab on grade foundations, exterior stucco lath walls and composition roofing and no fireplace in these buildings. Bldg. 416 & 428 are similar residential buildings, and both are one story above grade with a below grade basement level, raised floor foundation system, exterior stucco lath walls and 'S' tile roofing with a brick fireplace at one end of the buildings. The following applies to all:

- We observed the interior of the existing buildings.
 - The interior walls and ceiling finish is conventional wood framed walls and roof, wood board slats with cementitious lath overlay and what appears to be oil-based paint.
 - The existing bathrooms have full height ceramic tile on walls in shower area and to mid-height on other walls. The bathroom floors are finished with ceramic tile.
 - Most of the interior floor finishes are ceramic tile or vinyl sheet flooring, square or long strip shaped.
- We observed the exterior of the existing buildings.
 - All buildings except #404 have exterior stucco lath over wood stud framing.
 - Building #400, 408,416 & 428 all have roof 'S' tiles which appears to be original to the structures. Building # 404, 406 & 422 have composition roofing which does not appear to be original but replaced at some time in the building's history.
 - O Building #416 & 428 have exposed fireplaces on the East side of the buildings and both show stress cracks in the flue above the roof structure. No visible cracks were observed on the interior face of the brick fireplaces.
 - Building #404 is unique since it is the only two-story structure, has exterior wood siding and appears to be more a commercial shop area rather than a residential structure.

See Following sample site pictures and highlighted site plan of general areas observed.

General Site Plan:



BUILDING INTERIORS – GENERAL CONDITIONS:

INTERIOR FINISHES









BATHROOMS





FLOORS







EXTERIOR FIREPLACES:









<u>BUILDING EXTERIORS – IN NUMERICAL ORDER:</u> #400





<u>#404</u>









#406





<u>#408</u>





#416









#422

















CONCLUSIONS

Per our noted onsite observation of the buildings located at The Port of Hueneme, CA, the following applies.

- Due to the extensive time that the existing buildings have been abandoned, unused or maintained, the integrity of the structures are compromised. Interior roof leaks, window leaks, and general exposure to the elements have left most interior finishes destroyed or deteriorated.
 - In addition, a large population of undomesticated cats have made the abandoned structures their habitat. Large amounts of cat feces were observed in all the structure's interior spaces.
- Due to the construction period of the structures (1930-1970), it is very likely that many of the existing construction materials; roof & ceiling finishes, floor and wall finishes, and interior ducts, pipes & paint all contain or are laced with asbestos and lead. Due to the lack of maintenance of the structures (1980-2022), it is very likely that the existence of mold within the exposed wall and raised floor areas all contain mold or mold spores. All these substances have been proven to be highly toxic products when exposed in a human environment.
- Some of the buildings due show areas which have been improved and repaired. But most of these are improvements are not consistent in all buildings and are sporadic and most likely based on a specific need in those buildings with improvements. For example, the new roofing materials observed on the noted buildings.
- Finally, unless there is a specific need for the use of one of these buildings offsite, the relocation, transportation, and re-installation of any of the existing
 buildings would be financially restricted. The testing and abatement of hazardous
 materials will be time consuming and expensive. Transporting the existing
 structures would result in damaged finishes and the need to reconstruct large
 portions of the structures, like the fireplaces, removed abated materials and
 cracked/damaged wall/roof/floor finishes. Also, the existing foundations cannot
 be moved with the structures so a new foundation system will need to be provided
 as necessary.

It is our recommendation, based on the noted observations, that the most viable solution for the structures is demolition. The structures have not been utilized in approximately 40 years. Any type of relocation of the structures would be more costly than creating a new similar structure where needed, due to the noted deterioration, likely existence of hazardous materials and extensive need of retrofit requirements if the structures are moved.

If you have any other comments or questions with the contents of this report, please feel free to contact us at your convenience.

Yours truly,

Eduardo Zarate P.E.

EXCLUSIONS

- I. This report does not express or imply any warranty of the structure but only addresses the condition of the portion which was readily accessible and observable at the time of the observation.
- II. It should be noted that the above report is based on visual observation and that there is no claim, either stated or implied, that all conditions were observed.
- III. The opinion and findings contained in this report are based on the information provided by on site field investigations performed as a part of the project. This report does not address any other portions of the structure other than those areas mentioned, nor does it provide any warranty, either expressed or implied, for any portion of the existing structures.
- IV. The observation of the reference buildings does not constitute a design of the structural system for the building and cannot be warranted. This report is limited to the observed conditions as much as site observation will allow.
- V. The following services and responsibilities are specifically excluded from this report:
 - a. Discovery, testing, monitoring, clean up or neutralization of pollutants and hazardous substances.
 - b. Determinations or advisement related to the existence or proportion of asbestos and lead. Modification, installation, abatement or removal of a product, material or process containing asbestos, lead, or fecal matter.
- VI. The opinions and comments in this report are based on visual observation only, unless noted otherwise. Architectural, Civil, Mechanical, Electrical, or Plumbing conditions are not included, and no warranty expressed or implied as to the conditions of the structure, is intended.

Appendix D
Phase I Environmental Site Assessment

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Phase I Environmental Site Assessment

Parcel B

Oxnard Harbor District - Port of Hueneme

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Appendix 4 - Additional Documentation



EXECUTIVE SUMMARY

This report presents the findings of a Phase I Environmental Site Assessment (ESA) for the property identified as Parcel B of the Oxnard Harbor District - Port of Hueneme located in the City of Port Hueneme, California (Figure 1, Vicinity Map). The subject property (Parcel B) is currently occupied by the Point Hueneme Lighthouse and former U. S. Navy buildings (14 total buildings onsite). The buildings are identified by numbers 400, 404, 406, 408, 416, 422, 428, 432, 436, 440, 444, 448, and 452. Currently the buildings are leased for various commercial and industrial uses. Current occupants utilize the area for various offices, storage and industrial uses including a biotechnology company and a welding shop.

Rincon Consultants performed a reconnaissance and hazardous materials survey of the subject property on September 10 and 16, 2015. The purpose of the reconnaissance was to observe existing subject property conditions, to observe existing hazardous materials and chemicals stored on the subject property, and to obtain information indicating the presence of recognized environmental conditions in connection with the subject property. A 1,500-gallon aboveground storage tank is locating inside Building 432, containing sea water. An aboveground propane tank and propane powered backup generator is located northwest of this building. A second above ground propane tank is east of Building 448. Building 444 is adjacent to the Site's seawater intake and contains pumps and piping associated with the movement of seawater onto the site. The northwest portion of the site is used as a welding shop. Welding materials and equipment are stored in portable storage containers or within cabinets. Welding equipment and materials are stored outside. Buildings 416, 422 and 428 could not be accessed during the site reconnaissance and appear to be vacant.

Chemicals and hazardous material containers were visually identified during the site reconnaissance are summarized in Rincon's report titled "Hazardous Materials Inspection for Parcel B of the Port of Hueneme, Port Hueneme, California" (draft dated September 18, 2015). In summary, small containers holding hydrocarbons (gasoline, oil, and transmission fluids) were noted throughout the site. Additionally, common household cleaning and maintenance products were noted in each of the accessible areas on the site. Small quantities of laboratory chemical are stored in Building 448 and utilized as part of Stellar Biotechnologies' operations. Small quantities of chemical waste is picked up and disposed by Clean Harbors on an as needed basis. During the site reconnaissance, Rincon observed three pad-mounted transformers located on the Site. There was no indication of a release in the vicinity of the transformers.

Four areas of the site were noted to contain soil piles from unknown sources. The soil piles were located along the fence line behind buildings, 428 and 416, in the western corner of area 452, in the storage area north of area 436, and on the south side of building 432. Composite samples were collected from each pile and were submitted to BC Laboratory of Bakersfield California. The samples were analyzed for total metals, volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), organochlorine pesticides, and total petroleum hydrocarbons as gasoline, diesel, and motor oil (TPH). VOCs and PCBs were not detected in any of the soil pile samples. Low concentrations of TPH and several pesticides were detected in the soil pile samples. The detected concentrations did not exceed the screening levels to which they were compared. Varying concentrations of metals were detected in the soil samples collected and analyzed for metals. All detected metals were within normal background concentrations.

Based on the detected concentrations of contaminants, the soil piles would be considered non-hazardous waste for disposal purposes. Although the detected concentrations of TPH and pesticides are low, we recommend that the soil piles be removed from the site and properly disposed at an accepting facility.

Environmental Data Resources, Inc. (EDR) was contracted to provide a database search of public lists of sites that generate, store, treat or dispose of hazardous materials or sites for which a release or incident has occurred. The EDR search was conducted for the subject property and included data from surrounding sites within a specified radius of the property. The subject property and adjacent properties were not listed on any of the databases searched by EDR. Five nearby properties (located within a one-half mile radius of the subject property) were listed on release databases searched by EDR (Envirostor or LUST). Based on information available through the Ventura County Environmental Health Division (VCEHD) online database, the five nearby release sites are not likely to impact the subject property.

Historical sources reviewed as part of the Phase I ESA include aerial photographs and topographic maps. The photos and maps reviewed indicate that the subject property was developed with the current lighthouse by at least 1947, as well as three of the smaller onsite structures on the southeastern quadrant of the property and one rectangular building on the western portion of the property. By 1966 and 1977, additional structures are developed on the southeastern quadrant of the property. By 1985, an additional structure is visible on the western portion of the property and the property resembles its present-day configuration. According to the Oxnard Harbor district representative, the buildings were formerly in use by the U.S. Navy.

Based on the findings of this Phase I ESA, no Recognized Environmental Conditions have been identified in connection with the property, however, the following is a suspect environmental condition:

Suspect Environmental Condition

• The historic industrial use of the subject property.

To determine if the historic industrial use of the subject property has adversely affected the subject property, the Oxnard Harbor district may want to consider collecting soil samples from throughout the site, and analyzing the samples for potential contaminants of concern including TPH, VOCs and total metals.

Based on the historic research conducted as part of this Phase I ESA the majority of the current Site structures were constructed prior to 1977. Although not considered a REC per the ASTM E1527-13 standard, structures constructed prior to 1978 may contain lead based paint (LBP) and structures constructed prior to 1981 may contain asbestos containing building materials (ACBM). Based on the age of the onsite structures, there is the potential that LBP and ACBM were used during the construction of the onsite structures. To determine if LBP and ACBM are present in the onsite structures, a LBP and ACBM survey should be conducted.

INTRODUCTION

This report presents the findings of a Phase I ESA conducted for the property identified as Parcel B of the Oxnard Harbor District - Port of Hueneme located in the City of Port Hueneme, California (Figure 1, Vicinity Map). The Phase I ESA was performed by Rincon Consultants, Inc. for the Oxnard Harbor District (Port of Hueneme) in general conformance with ASTM E 1527-13, and our proposal dated September 8, 2015 and existing Master Services Agreement dated January 13, 2014. The following sections present our findings and provide our opinion as to the presence of recognized environmental conditions.

PURPOSE

The purpose of this Phase I ESA was to assess the environmental conditions of a property, taking into account commonly and reasonably ascertainable information and to qualify for Landowner Liability Protections under the Brownfields Amendments to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

A recognized environmental condition (REC) is defined pursuant to ASTM E 1527-13 as, "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: 1) due to any release to the environment; 2) under conditions indicative of a release to the environment; 3) under conditions that pose a material threat of a future release to the environment".

A Controlled REC is defined pursuant to ASTM E 1527-13 as,

"a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). A condition considered by the environmental professional to be a controlled recognized environmental condition shall be listed in the findings section of the Phase I Environmental Site Assessment report, and as a recognized environmental condition in the conclusions section of the Phase I Environmental Site Assessment report".

A Historical REC is defined pursuant to ASTM E 1527-13 as,

"a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by regulatory authority, without subjecting the property to any required controls (for example, use restrictions, activity and use limitations, institutional controls, or engineering controls). Before calling the past release a historical recognized environmental condition, the environmental professional must determine whether the past release is a recognized environmental condition at the time the Phase I Environmental Site Assessment is conducted (for example, if there has been a change in the regulatory criteria). If the EP [Environmental Professional] considers the past release to be a

recognized environmental condition at the time the Phase I ESA is conducted, the condition shall be included in the conclusions section of the report as a recognized environmental condition".

A de minimis condition is defined pursuant to ASTM E 1527-13 as,

"a condition that generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis conditions are not recognized environmental conditions nor controlled recognized environmental conditions".

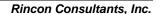
SCOPE OF SERVICES

The scope of services conducted for this study is outlined below:

- Perform a reconnaissance of the site to identify obvious indicators of the existence of hazardous materials.
- Observe adjacent or nearby properties from public thoroughfares in an attempt to see if such properties are likely to use, store, generate, or dispose of hazardous materials.
- Obtain and review an environmental records database search from Environmental Data Resources, Inc. (EDR) to obtain information about the potential for hazardous materials to exist at the subject property or at properties located in the vicinity of the subject property.
- Review files for the subject property and immediately adjacent properties as identified in the EDR report, as applicable.
- Review the current U.S. Geological Survey (USGS) topographic map to obtain information about the subject property's topography and uses of the subject property and properties in the vicinity of the subject property.
- Review additional pertinent record sources (e.g., California Division of Oil and Gas records, online databases of hazardous substance release sites), as necessary, to identify the presence of RECs at the subject property.
- Review reasonably ascertainable historical resources (e.g., aerial photographs, topographic maps, fire insurance maps, city directories) to assess the historical land use of the subject property and adjacent properties.
- Provide a property owner interview questionnaire to the property owner or a designated subject property representative identified to Rincon by the client.
- Provide a user interview questionnaire to a representative of the client, the user of the Phase I ESA.
- Conduct interviews with other property representatives (e.g., key site manager, occupants), as applicable.
- Review Client-provided information (e.g., previous environmental reports, title documentation), as applicable.

SIGNIFICANT ASSUMPTIONS, LIMITATIONS, DEVIATIONS, EXCEPTIONS, SPECIAL TERMS, AND CONDITIONS

This work is intended to adhere to good commercial, customary, and generally accepted environmental investigation practices for similar investigations conducted at this time and in



this geographic area. No guarantee or warranties, expressed or implied are provided. The findings and opinions conveyed in this report are based on findings derived from a site reconnaissance, review of an environmental database report, specified regulatory records and historical sources, and comments made by interviewees. This report is not intended as a comprehensive site characterization and should not be construed as such. Standard data sources relied upon during the completion of Phase I ESAs may vary with regard to accuracy and completeness. Although Rincon believes the data sources are reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources it has used. Additionally, pursuant to our contract, the data sources reviewed included only those that are practically reviewable without the need for extraordinary analysis.

Rincon has not found evidence that hazardous materials or petroleum products exist at the subject property at levels likely to warrant mitigation. Rincon does not under any circumstances warrant or guarantee that not finding evidence of hazardous materials or petroleum products means that hazardous materials or petroleum products do not exist on the subject property. Additional research, including surface or subsurface sampling and analysis, can reduce the client's risks, but no techniques commonly employed can eliminate these risks altogether.

In addition, pursuant to ASTM E 1527-13 practice, our scope of services did not include any inquiries with respect to asbestos containing building materials, biological agents, cultural and historic resources, ecological resources, endangered species, health and safety, indoor air quality unrelated to release of hazardous substances or petroleum products into the environment, industrial hygiene, lead-based paint, lead in drinking water, mold, radon, regulatory compliance, wetlands, or high voltage power lines.

USER RELIANCE

The Oxnard Harbor District (Port of Hueneme) has requested this assessment and will use the assessment to provide information for the purposes of purchasing or acquiring said property. This Phase I ESA was prepared for use solely and exclusively by the Oxnard Harbor District. No other use or disclosure is intended or authorized by Rincon. Also, this report is issued with the understanding that it is to be used only in its entirety. It is intended for use only by the client, and no other person or entity may rely upon the report without the express written consent of Rincon.

SITE DESCRIPTION

Location

The subject property is identified as Parcel B of the Oxnard Harbor District - Port of Hueneme. The subject property is part of 333 Ponoma Street, Port Hueneme. The subject property is identified by a portion of Assessor Parcel Number (APN) 206-002-034 and is located on the east side of the Port of Hueneme harbor entrance (south of West Port Hueneme Road) (Figure 2, Site Map). The Pacific Ocean is immediately adjacent to the west and south of the subject property.

Subject Property and Vicinity General Characteristics

The subject property (Parcel B) includes the Point Hueneme Lighthouse and former U. S. Navy buildings. The buildings are identified by numbers 400, 404, 406, 408, 416, 422, 428, 432, 436, 440, 444, 448, and 452. Currently the buildings are leased for various commercial and industrial uses, including a welding shop.

The subject property is located in an area that is primarily comprised of commercial, industrial, and military land uses (Naval Base Ventura County). Properties in the vicinity of the subject property include offices, warehouses, storage facilities, and berths. The current adjacent land uses are described in Table 1 and depicted on Figure 3, Adjacent Land Use Map.

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Area	Use						
Northern Properties	Industrial-type land use (fish processing, loading dock, private offices), followed by Port Hueneme Harbor						
Eastern Properties	Industrial-type land use (loading docks for Yara international, above ground storage tanks for fertilizer)						
Western Properties	NRC Environmental storage and garage, followed by the Pacific Ocean/Port Hueneme Harbor						

Public walkway, followed by the Pacific Ocean/Port

Table 1 - Current Uses of Adjacent Properties

Descriptions of Structures, Roads, Other Improvements on the Site

Southern Properties

The subject property is developed with the Point Hueneme Lighthouse and former U.S. Navy buildings. Access to the subject property is available from a driveway on West Port Hueneme Road.

Hueneme Harbor

The subject property (Parcel B) contains 11 structures in a fenced area with restricted public access within a free trade zone serving the Port of Hueneme Harbor. These structures include the 1940 Point Hueneme Lighthouse, a 48 foot tall fog light for marine traffic located in the southwest portion of the site. Seven residential structures exist in the southeast and central portions of Parcel B. These structures vary from approximately 35 to 50 years old and are currently used for storage, private offices, or are vacant. Six of the structures are single-story, some with basements, and the southern structure is two-stories tall. A two-story commercial warehouse, single-story office building, and a single-story pump house are located in the southwest portion of the property. Parking lots extend from the east entry across the north portions of Parcel B to the structure on the southwest corner of the subject property. Foundation remnants of three buildings exist in the west and southwest areas of Parcel B. Undeveloped land extends from the east to the central portions of the parcel along the south fence line. Several temporary storage sheds and shipping container are used for storage at the subject property. Details regarding the individual onsite structures are as follows:

- Buildings 400, 404, 406, 408: occupied by a seawater distribution company (limited access)
- Building 416, 422, 428: inaccessible; appear to be vacant

- Building 432: occupied by Stellar Biotechnologies (contains a 1,500-gallon aboveground storage tank containing seawater)
- Building 436: concrete foundation from a former building; not currently being used
- Building 440: Point Hueneme Lighthouse and museum
- Building 444: adjacent to the onsite seawater intake system and contains pumps and piping associated with the movement of seawater onto the site
- Buildings 448 and 452: occupied by Stellar Biotechnologies

A chain-link fence was noted around the perimeter of the subject property. Access to the subject property is available from gates on the east and southwest boundaries of the subject property.

USER PROVIDED INFORMATION

As described in ASTM E 1527-13 Section 6, we attempted to interview the Oxnard Harbor District (Port of Hueneme) for actual knowledge pertaining to the subject property to help identify recognized environmental conditions in connection with the property. A User Questionnaire, as provided by ASTM Appendix X3, was provided to the Oxnard Harbor District (Port of Hueneme). A completed questionnaire has not been returned as of the date of this report.

RECORDS REVIEW

PHYSICAL SETTING SOURCES

Topography

The current USGS topographic map (Oxnard Quadrangle, 1967, photorevised 1949) indicates that the subject property is situated at an elevation of approximately 10 feet above mean sea level with topography sloping to the south toward the Pacific Ocean. The adjacent topography is fairly consistent with the subject property.

Geology and Hydrogeology

The project site is located within the Transverse Ranges Geomorphic Province, which is characterized by east-west trending structural features in contrast to the dominant northwest-southeast structural trend of California. The site is situated in the Oxnard Plain, a large structural basin within the Province.

Site Geology

According to the California Geological Survey, Geologic Map of California, Los Angeles Sheet (1969), the subject property is underlain by Quaternary age alluvium.

Regional Groundwater Occurrence and Quality

The subject property is located within the Oxnard Plain Pressure Basin, part of the Oxnard Plain Groundwater Basin. The Oxnard Plain Pressure Basin consists of three distinct hydrogeologic units (from top to bottom): the semi-perched aquifer and clay cap, the Upper Aquifer System, and the Lower Aquifer System.

The semi-perched aquifer extends from the base of developed soil horizons to an average depth of approximately 75 feet beneath most of the Oxnard Plain. This aquifer consists primarily of geologically recent stream-deposited sands and gravels, with minor silt and clay interbeds. The semi-perched groundwater has, in general, limited well yield and poor water quality caused by agricultural return water and evapotranspiration. Groundwater flow in this semi-perched zone is generally to the southwest but fluctuates locally.

The clay cap underlies the semi-perched aquifer zone and acts as an aquitard for the underlying Upper Aquifer System (Oxnard Aquifer). The Upper and Lower Aquifer Systems have historically been used for water supply; although, water quality varies throughout the Basin as a result of seawater intrusion.

During the preparation of this Phase I ESA, we reviewed the California State Water Resources Control Board's (SWRCBs) online GeoTracker database to determine groundwater flow direction in the vicinity of the subject property. According to the Quarterly Groundwater Monitoring and Remediation Status Report for the Former Tesoro Port Hueneme Terminal located at 141 West Hueneme Road - dated July 9, 2015 (located less than 1/4 mile to the east of the subject property), groundwater elevations from the semiannual monitoring event in April and May 2015 were approximately 3.8 to 10.1 feet below ground surface. The report states that "Literature indicates that synoptic groundwater elevation measurements cannot be used to accurately evaluate groundwater flow at sites with tidally-induced water table fluctuations. As a result, groundwater elevation contours were not generated. Historically, the general direction of groundwater flow has been toward the west based on the lateral distribution of dissolved-phase impacts."

STANDARD ENVIRONMENTAL RECORD SOURCES

Environmental Data Resources, Inc. (EDR) was contracted to provide a database search of public lists of sites that generate, store, treat or dispose of hazardous materials or sites for which a release or incident has occurred. The EDR search was conducted for the subject property and included data from surrounding sites within specified radii of the property. A copy of the EDR report, which specifies the ASTM search distance for each public list, is included as Appendix 2. As shown on the attached EDR report, federal, state and county lists were reviewed as part of the research effort. Please refer to Appendix 2 for a complete listing of sites reported by EDR and a description of the databases reviewed.

The Map Findings Summary, included in the EDR report, provides a summary of the databases searched, the number of reported facilities within the search radii, and whether the facility is located onsite or adjacent to the subject property. The following information is based on our review of the Map Findings Summary and the information contained in the EDR report.

Subject Property

The subject property was not listed on any of the regulatory databases reviewed by EDR.

Offsite Properties

Offsite properties listed by EDR fall under two general categories of databases: those reporting unauthorized releases of hazardous substances (e.g., LUST, National Priority List [a.k.a. Superfund sites], and corrective action facilities), and databases of businesses permitted to use hazardous materials or generate hazardous wastes, for which an unauthorized release has not been reported to a regulatory agency.

Rincon reviewed the EDR Radius Map and select detailed listings to evaluate their potential to impact the subject property, based on the following factors:

- Reported distance of the facility from the subject property
- The nature of the database on which the facility is listed, and/or whether the facility was listed on a database reporting unauthorized releases of hazardous materials, petroleum products, or hazardous wastes
- Reported case type (e.g., soil only, failed UST test only)
- Reported substance released (e.g., chlorinated solvents, gasoline, metals)
- Reported regulatory agency status (e.g., case closed, "no further action")
- Location of the facility with respect to the reported groundwater flow direction (discussed in the Geology and Hydrogeology section of this report)

Facilities/properties that were interpreted by Rincon to be of potential environmental concern to the subject property, based on one or more of the factors listed above, are summarized in Table 2. In accordance with ASTM, contamination migration pathways in soil, groundwater, and soil vapor were considered in our analysis of offsite properties of potential environmental concern.

Table 2 - EDR Listing Summary of Select Sites within One-Half Mile of the Subject Site

Site Name EDR Site ID		Site Address	Distance from Subject Property (miles)	Database Reference
Nearby Sites				
Naval Facility Engineering	1	560 Center Drive	Less than 1/8 mile (300 feet) to the east	UST
Naval Dir Finder	2	Not listed	Less than 1/8 mile (300 feet) to the east	ENVIROSTOR
Oxnard Harbor District	4	105 East Port Hueneme Road	Less than 1/8 mile (350 feet) to the north	LUST, WDS
Tesoro Refining	Orphan Site	141 Hueneme Road	Between 1/4 -1/2 mile to the east	ENVIROSTOR
Naval Base Ventura County*	3	CB Center-Code 80	Between 1/4-1/2 mile to the west	ENVIROSTOR, HWP

Regulatory agency information reviewed for the listings in the table above are summarized in the Additional Environmental Record Sources section of this report.

Orphan Listings

EDR reported one orphan or unmapped site listing, which EDR is unable to plot due to insufficient address information. Based on Rincon's review of the State Water Resources Control Board (SWRCB) GeoTracker online database, the orphan listing is associated with Tesoro Refining and is located about 1,850 feet to the east-northeast of to the east-northeast of the subject property. The Tesoro property is associated with an open release case currently undergoing remediation.

ADDITIONAL ENVIRONMENTAL RECORD SOURCES

Review of Agency Files

As a follow-up to the database search, Rincon reviewed regulatory information for facilities within the specified search radii that were interpreted to have the potential to impact the subject property, based on one or more factors previously discussed (e.g., distance, open case status, up-gradient location, soil vapor migration).

The following is a summary of our review of regulatory information obtained from review of online sources (e.g., State Water Resources Control Board {SWRCB} GeoTracker database, the California Department of Toxic Substances Control {DTSC} Envirostor database) and/or files requested from the applicable regulatory agency, as described below.

Subject Property

The subject property was not listed in any of the databases searched by EDR.

Adjacent Properties

None of the adjacent properties were listed in databases searched by EDR.

Nearby Sites

Five nearby properties were listed on release databases searched by EDR:

- Naval Dir Finder Address not listed: According to the EDR report and the Envirostor, database the property is located about 300 feet to the east of the subject property. The Envirostor listing indicates that the case needs military evaluation and was inactive as of July 1, 2005. No other information was available regarding the listing. Based on the plotted location of this site, it appears that this listing may refer to the Naval Facility Engineering site described below.
- Naval Facility Engineering 560 Center Drive: The property is listed on the
 underground storage tank (UST) database. According to EDR, this property is located
 about 300 feet to the east of the subject property, however the former USTs located at this
 site were located about 1,000 feet to the east of the subject property. According to the
 Ventura County Environmental Health Division (VCEHD) online database, two former

5,000-gallon USTs are associated with property. The tanks were removed on December 18, 1995. A letter from the VCEHD dated April 15, 1996 indicates that a release of fuel oil was detected and documented during tank removal activities (due to tank corrosion). Soil samples collected from the bottom of the excavations indicated low levels of total extractable petroleum hydrocarbons (TEPH) (13 to 56 milligrams per kilogram [mg/kg]) and no detectable levels of BTEX or other VOCs. Based on the information reviewed, and the distance from the subject property, the release associated with the former USTs is not expected to be affecting the subject property.

- **Tesoro Refining -** 141 Hueneme Road: According to GeoTracker, the Tesoro property is located about 1,850 feet to the east-northeast of the subject property. According to GeoTracker, the Tesoro site is a "Cleanup Program" case which is open and undergoing groundwater monitoring and remediation of light non-aqueous phase liquid (LNAPL). According to Orion's Quarterly Groundwater Monitoring and Remediation Status Report (July 9, 2015 - Appendix 4) total petroleum hydrocarbons as diesel (TPHd) and naphthalene in groundwater were detected at concentrations exceeding site-specific riskbased cleanup levels at several monitoring wells within the LNAPL plume. Between March and May 2015, a full-scale oxygen gas injection system was installed to remediate hydrocarbon-impacted groundwater downgradient of the bulk storage terminal. In addition, an existing LNAPL recovery system was expanded to wells located within the oxygen injection system treatment area. During June 2015, operation of the oxygen gas injection and expanded LNAPL recovery systems began. The most recent groundwater monitoring report (July 9, 2015 - Appendix 4) indicates that concentrations of TPHd and naphthalene are non-detect in downgradient monitoring wells PZ-14, PZ-16, and PZ-19. Based on the non-detect concentrations of TPHd and naphthalene in downgradient wells (which are approximately 1,500 feet east-northeast of the subject property), the former nearby Tesoro release is not expected to be impacting the subject property at this time.
- Naval Base Ventura County CB Center-Code 80: According to the EDR report and the
 Envirostor database, the Naval Base Ventura County (NBVC) property is located 1,800 feet
 to the west of the subject property but also includes the waterway entrance to the harbor
 which is adjacent to the west of the subject property. The NBVC property is listed on the
 Envirostor and HWP databases. According to the Envirostor database the following events
 occurred for this site:
 - Entire Facility: Release to GW Controlled Determination- Applicable As Of This Date 10/13/2004
 - o Entire Facility: Human Exposures Controlled Determination- Applicable As Of This Date 10/13/2004
 - o Entire Facility: Release to GW Controlled Determination-Facility Does Not Meet Definition 3/9/2001
 - Entire Facility: Human Exposures Controlled Determination-Facility Does Not Meet Definition 3/9/2001
 - Entire Facility: Release to GW Controlled Determination-Facility Does Not Meet Definition 6/10/1998
 - o Entire Facility: Referred to a Non-RCRA Authorized Site Mitigation /10/1998
 - o Entire Facility: Human Exposures Controlled Determination-Facility Does Not Meet Definition 6/10/1998

- Site 14 Earth Moving Training Area: Date for Remedy Selection (CM Imposed)
 5/31/1998
- Site 14 Earth Moving Training Area: RCRA Facility Investigation Report Approved /12/1998
- o Entire Facility: RCRA Facility Investigation Workplan Approved 3/12/1998
- Site 14 Earth Moving Training Area: Corrective Measure Study Workplan Approved 3/12/1998
- Site 14 Earth Moving Training Area: Corrective Measure Study Approved 3/12/1998
- o Sites 1-3 Stabilization Construction Completed: 6/1/1997
- o Entire Facility: RCRA Facility Investigation Imposition 1/1/1994
- o Sites 1-3: Stabilization Measures Implemented-Primary Measure is Source Removal and/or Treatment 1/1/1994
- o Entire Facility: RCRA Facility Assessment Completed-Assessment was a RCRA Facility Assessment 2/1/1993

According to the Envirostor database the NBVC Envirostor case was closed (as of May 21, 2002). The HWP, or Envirostor Permitted Facilities Listing, is reported as "closed" by EDR. Records reviewed on GeoTracker for the NBVC indicate: that an old pistol range and an old rifle range are located about 1,000 feet and 1,500 feet to the west of the subject property across the harbor waterway entrance and both these sites are in the "site assessment phase." Furthermore an additional NBVC site (IRP Site 19 Tidal Canal and IRP Site 19A [Drainage Ditches]) is located at least located 3,000 feet to the north-northwest of the subject property. Documents reviewed on GeoTracker indicate that sediment in the tidal canal has been impacted with metals, PCBs, PAHs and pesticides; however PCBs were determined to be the health risk contaminant of concern. Removal of the impacted sediment was conducted in December 2014/January 2015. Based on the distances from the subject property and the fact that the sediment has been removed from the Tidal Canal, the listings for the NBVC are not expected to adversely impact the subject property.

Oxnard Harbor District - 105 Port Hueneme Road: According to EDR, the Oxnard Harbor District property is located about 1/2 mile east of the subject property; however, files available through the VCEHD online database indicate that the property is actually located approximately 350 feet north of the subject property. The nearby property is listed on the LUST and WDS databases. According to files available through the VCEHD online database, a release of gasoline/kerosene/waste oil occurred on the nearby property on September 9, 1992. The UST(s) were subsequently removed on October 29, 1992 and soil samples were collected from the former tank cavity and piping trenches. No detectable concentrations of TPHd, TPH-gasoline (TPHg), or benzene, toluene, ethylbenzene, and xylenes (BTEX) were detected in the tank cavity soil samples. TPHd was detected in six of 12 soil samples collected from piping trenches. TPHd concentrations ranged from below 100 milligrams per kilogram (mg/kg) to 260 mg/kg. Two groundwater monitoring wells were installed on the nearby property. Analytical results did not reveal the presence of TPH in in groundwater. Closure of the Oxnard Harbor District case was granted by the County of Ventura Resource Management Agency in a letter dated May 2, 1994; Based on the documents reviewed, the former release at the nearby property is not likely to impact the subject property.

KNOWN OR SUSPECT CONTAMINATED RELEASE SITES WITH POTENTIAL VAPOR MIGRATION

The EDR report was reviewed to identify nearby known or suspect contaminated sites that have the potential for contaminated vapor originating from the nearby site to be migrating beneath the subject property. Based on the ASTM E 2600-10, *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions*, the following minimum search distances were initially used to determine if contaminated soil vapors from a nearby known or suspect contaminated site have the potential to be migrating beneath the subject property:

- 1/10 mile (528 feet) for petroleum hydrocarbons
- 1/3 mile (1,760 feet) for other contaminants of concern (COCs)

If up-gradient known or suspect contaminated sites are located within the above referenced distances from the subject property, online resources are reviewed to determine the extent of the contaminated plume at those sites. The following describes search distances for contaminated plumes of petroleum hydrocarbons and other COCs.

Petroleum Hydrocarbons

Based on our review of the EDR report information as indicated above, there are no adjacent or up-gradient known or suspect petroleum hydrocarbon impacted soil or groundwater plumes located within 30 feet of the subject property.

Other COCs

Based on our review of the EDR report, there are no adjacent or up-gradient known or suspect contaminated soil or groundwater plumes located within 100 feet of the subject property.

Review of State of California Division of Oil and Gas Records

A review of the Department of Conservation, Division of Oil, Gas & Geothermal Resources Online Mapping System (DOGGR) indicates that there are no oil wells on the subject property. The nearest oil well to the subject property is located about 1,500 feet to the northwest of the subject property. According to DOGGR, the well is plugged, the well operator was SWEPI, LP, and the well API number is 21120097.

HISTORICAL USE INFORMATION ON THE PROPERTY AND THE ADJOINING PROPERTIES

The historic records review completed for this Phase I ESA includes aerial photographs and topographic maps, as detailed in the following sections. Copies of the historical resources reviewed are included in Appendix 3. Table 3 provides a summary of the historical use information available for the subject property.

Review of Historic Aerial Photographs

Aerial photographs from EDR's aerial photograph collection were obtained and reviewed.

Review of City Directory Listings

EDR was contracted to provide copies of city directory listings for the subject property. As indicated in the attached report, no records were provided by EDR for the subject property or adjacent properties.

Review of Fire Insurance Maps

EDR was contracted to provide copies of fire insurance maps for the subject property. As indicated in the attached report, fire insurance maps were not available for the subject property or adjacent properties.

Review of Historic Topographic Maps

Historic topographic maps from EDR's map collection were obtained and reviewed.

Summary of Historic Uses

Subject Property

Based on our review of the documents listed above and summarized in Table 3 below, it appears that the subject property was developed with the current lighthouse by at least 1947, as well as three of the smaller onsite structures on the southeastern quadrant of the property and one rectangular building on the western portion of the property. By 1966 and 1977, additional structures are developed on the southeastern quadrant of the property. By 1985, an additional structure is visible on the western portion of the property and the property resembles its present-day configuration.

Table 3 - Historical Use of the Subject Property

Year	Use	Source							
	Parcel B, Oxnard Harbor District								
1904	The property appears undeveloped.	Topographic Map (TM) – Hueneme Quadrangle							
1910	Similar to the 1904 TM.	TM – Southern CA Sheet 3							
1947	Similar to the 1910 TM.	TM – Hueneme Quadrangle							
1947	The property appears to be developed with the current lighthouse structure, as well as three of the current onsite structures developed on the southeastern quadrant of the property. In addition, a rectangular structure is visible on the western portion of the property.	Aerial Photograph (AP) – USGS							
1951	The property appears to have been developed with five structures and a lighthouse.	TM – Oxnard Quadrangle							

Year	Use	Source
1953	Similar to the 1947 AP.	AP – USGS
1967	The property appears to be developed with structures and a lighthouse.	TM – Oxnard Quadrangle
1967	The aerial is blurry; however, the property appears to be developed with the lighthouse and six of the smaller brown roofed structures visible today.	AP – USGS
1977	Similar to the 1967 AP, with the addition of a seventh brown roofed structure.	AP – Teledyne
1985	An additional structure is visible on the western portion of the property; the property appears to be developed similar to today with approximately 13 onsite structures.	AP – USGS
1994	Similar to the 1985 AP.	Aerial Photograph – USGS/DOQQ
2005	Similar to the 1994 AP.	Aerial Photograph – USDA/NAIP
2009	Similar to the 2005 AP.	Aerial Photograph – USDA/NAIP
2010	Similar to the 2009 AP.	Aerial Photograph – USDA/NAIP
2012	Similar to the 2010 AP.	Aerial Photograph – USDA/NAIP

Northern Adjacent Property

Based on our review of the documents listed above, it appears that the northern adjacent properties were developed with two railroad spurs in 1947, as well as a structure. By 1951, the railroad spurs are no longer visible and by 1967 the structure is no longer visible. By 1977 the property is developed with multiple structures, including what appears to be two cylindrical features. By 1994, three structures are visible on the property. By 2009, the property is developed with five structures and resembles its present-day configuration.

Eastern Adjacent Property

Based on our review of the documents listed above, it appears that the eastern adjacent properties were developed with multiple large structures from at least 1967 through 1994. By 2005, the property is developed with five large cylindrical aboveground storage tanks (ASTs) and one onsite structure and resembles its present-day configuration.

Southern Adjacent Property

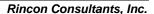
Based on our review of the documents listed above, it appears that the southern adjacent property boundary is bounded by a road followed by a beach and the Pacific Ocean.

Western Adjacent Property

Based on our review of the documents listed above, it appears that the western property boundary is bounded by a retaining wall followed by the Pacific Ocean.

Gaps in Historical Sources

Several gaps of greater than 5 years were identified in the historical records reviewed. The gaps included from 1904 to 1910, from 1910 to 1947, from 1953 to 1967, from 1967 to 1977, from 1977



to 1985, from 1985 to 1994, and from 1994 to 2005. These gaps are considered insignificant because the subject property land use appears to be similar prior to and following the gaps.

INTERVIEWS

Rincon Consultants performed interviews regarding the subject property and surrounding areas. The purpose of the interview was to discuss current and historical subject property conditions and to obtain information indicating the presence of recognized environmental conditions in connection with the property.

INTERVIEW WITH OWNER

An interview questionnaire was provided to the Oxnard Harbor District prior to the site reconnaissance. A completed questionnaire has not been returned as of the date of this report.

INTERVIEW WITH SITE MANAGER

A site manager was not identified to Rincon.

INTERVIEWS WITH OCCUPANTS

Because the onsite structures are used for offices and industrial-type purposes, no occupants were interviewed as part of this research effort.

INTERVIEWS WITH LOCAL GOVERNMENT OFFICIALS

Files were available for online review (http://www.yeenvhealth.org) for the Naval Facility Engineering, Tesoro Refinery, the Oxnard Harbor District site and the Naval Base Ventura County Sites. In addition, records requests for the Naval Facility Engineering property and for Naval Base Ventura County were also submitted to the VCEHD. A response has not been received at the time of this report.

An online records review (http://www.vcenvhealth.org) was conducted for the address of which the subject property is part of: 333 Ponoma Street. No UST files were identified. Based on the online file review, there are no indications of USTs at the subject property. Available documents included CUPA site files (Hazardous Materials Inspection forms) and two Hazardous Material Spill Reports. The two Hazardous Material Spill Reports included the following:

- On December 1, 2000, a petroleum oil sheen was observed in the harbor water (adjacent to the site). The report indicates that Herbert Smart with the Oxnard Harbor District reported the sheen. The report states that he "observed this orphan sheen from his window. States that the sheen is unrecoverable. Smart states that the Navy is on scene observing the sheen"
- On June 8, 2001 spill of 5-gallons of diesel fuel affected the water adjacent to Dock #1 of the Port Hueneme Harbor. The cause of the spill was that a tank was overfilled and the

diesel was emitted through the vent. The spill was reportedly contained. The report indicates that Jeff Hague with the Tidewater Marine reported the spill.

Based on the documents reviewed, the one-time occurrences and the fact that the spills occurred over 13 years ago, these spills are not expected to be adversely impacting the subject property.

SITE RECONNAISSANCE

Rincon Consultants performed a reconnaissance of the subject property on September 10 and September 16, 2015 accompanied by Christina Birdsey, Director of Operations and Security for the Oxnard Harbor District. The purpose of the reconnaissance was to observe existing subject property conditions and to obtain information indicating the presence of recognized environmental conditions in connection with the property.

METHODOLOGY AND LIMITING CONDITIONS

The site reconnaissance was conducted by 1) observing the subject property from public thoroughfares, 2) observing the adjacent properties from public thoroughfares, 3) observing the interior of the onsite structures, 4) observing the exterior of the structures, 5) backtracking to correlate exterior features with interior features, as necessary, 6) observing the subject property from paved areas. Our observation of the subject property was limited by physical obstructions including some locked buildings.

CURRENT USE OF THE PROPERTY AND ADJACENT PROPERTIES

The subject property is located on the east side of the Port of Hueneme harbor entrance and includes the Point Hueneme Lighthouse and former U. S. Navy buildings. Currently the buildings are leased for various commercial and industrial uses, including a biotechnology facility, a welding shop, and a sea water intake facility. Adjacent businesses include commercial and industrial properties.

PAST USE OF THE PROPERTY AND ADJACENT PROPERTIES

Based on our site reconnaissance, it appears that the subject property was previously used by the U.S. Navy.

CURRENT OR PAST USES IN THE SURROUNDING AREAS

The subject property is surrounded by the Port Hueneme Harbor/Pacific Ocean and industrial-type land uses as detailed in the Site Description section of this report. Past uses of the surrounding area are not readily apparent based on the site reconnaissance.

GEOLOGIC, HYDROGEOLOGIC, HYDROLOGIC AND TOPOGRAPHIC CONDITIONS

Geologic, Hydrogeologic, Hydrologic and topographic information are as previously stated in the Physical Settings Section of this report.

GENERAL DESCRIPTION OF STRUCTURES

Onsite structures are as described previously in the Site Description section of this report.

INTERIOR AND EXTERIOR OBSERVATIONS

Storage Tanks

During the site reconnaissance, we observed a 1,500-gallon aboveground storage tank containing sea water on the subject property. Two approximately 1,000-gallon propane tanks were also observed. No other above-ground or below-ground tanks were reported by the subject property representative or were observed during the site reconnaissance. Rincon did not observe indications of releases from the tanks on the subject property.

Drums

During the site reconnaissance, we observed one 55-gallon drum containing waste oil on the subject property. The drum was in a secondary containment in the form of a raised pad with a grate beneath. No other drums were reported by the site representative or observed during the site reconnaissance. Rincon did not observe indications of releases from the drum on the subject property.

Hazardous Substances and Petroleum Products

Small containers of hydrocarbons (gasoline, oil, and transmission fluids) were noted throughout the subject property. Additionally, common household cleaning and maintenance products were noted throughout the subject property. Small quantities of laboratory chemicals are stored in Building 448 and utilized as part of Stellar Biotechnologies operations. Small quantities of chemical waste are picked up and disposed by Clean Harbors on an as needed basis. Rincon did not observe indications of releases from the observed containers.

Unidentified Substance Containers

Unidentified substance containers or unidentified containers that might contain hazardous substances were not observed during the site reconnaissance.

Odors

During the site reconnaissance, Rincon did not identify any strong, pungent, or noxious odors.

Pools of Liquid

During the site reconnaissance, Rincon identified a pool of standing surface water on the northern portion of the parking lot, as well as the southwest corner of the property. The water appeared to be ponded storm water accumulated from a recent rain event. Rincon did not identify any other pools of liquid. In addition, sumps containing liquids likely to be hazardous substances or petroleum products were not observed.

Indications of Polychlorinated Biphenyls (PCBs)

During the site reconnaissance, Rincon observed three pad-mounted transformers located on the subject property. The transformers are located adjacent to building 440, and to the north of buildings 408 and 444. There is a potential for the transformers to contain polychlorinated biphenyls (PCBs). There was no indication of a release in the vicinity of the transformers.

Other Conditions of Concern

During the site reconnaissance Rincon did not note any of the following:

- clarifiers and sumps
- degreasers/parts washers
- pits, ponds, and lagoons
- stained soil
- solid waste/debris
- wells
- septic systems

Soil Piles – Four areas on the subject property were noted to contain soil piles from unknown sources. The soil piles were located in the along the fence line behind buildings, 428 and 416, in the western corner of area 452, in the storage area north of area 436, and on the south side of building 432.

Stained Pavement – Oil stained pavement was observed south of building 432 and beneath a bus parked north of building 408. In addition, oil staining from parked vehicles was observed on the parking lot on the northern portion of the subject property.

Waste Water – An onsite saltwater intake system pumps in sea water for use at the sea water production facility and the biotechnology company. The seawater is then discharged back into the ocean through a drainage pipe.

SOIL PILE SAMPLING

Four areas on the subject property were noted to contain soil piles from unknown sources. The soil piles were located in the along the fence line behind buildings 428 and 416, in the western corner of area 452, in the storage area north of area 436, and on the south side of building 432.

Composite samples were collected from each of the four soil piles (C1, C2, C3 and C4) on September 10, 2015. The soil samples were collected in acetate liners, capped, labeled, and stored on ice pending delivery to BC Laboratory of Bakersfield California. The samples were couriered to the state certified analytical laboratory using chain-of-custody protocol. The samples were analyzed for total metals by EPA method 6010B/7471A, volatile organic compounds (VOCs) by EPA method 8260B, polychlorinated biphenyls (PCBs) by EPA method 8082, organochlorine pesticides by EPA method 8081A, and total petroleum hydrocarbons as gasoline, diesel, and motor oil (TPH) by EPA method 8015B.

RESULTS OF THE SOIL PILE SAMPLING

Soil pile sampling results are shown in Tables 4, 5 and 6. The Laboratory Analytical Report is included as Appendix 4. The following summarizes the soil pile sampling results.

Total Petroleum Hydrocarbons

As shown in Table 4, TPH as gasoline was not detected in the soil matrix samples. Low levels of TPH as diesel were detected in all four of the soil pile samples at concentrations ranging from 5.5 to 13 milligrams per kilogram (mg/kg). Low levels of TPH as oil were detected in all four of the soil pile samples at concentrations ranging from 27 to 150 mg/kg.

The LA RWQCB has established soil screening levels (SSLs) for contaminants detected in soil matrix samples. As shown in Table 4, the detected concentrations of TPH in the soil matrix samples are well below their respective LA RWQCB SSLs.

Volatile Organic Compounds

As shown in Table 4, no concentrations of VOCs were detected in the soil pile samples.

Metals

As shown in Table 5, varying concentrations of metals were detected in the soil samples collected and analyzed for metals. All detected metals were within normal background concentrations. The detected concentrations of metals were compared to the California Human Health Screening Levels (CHHSLs). The California Environmental Protection Agency (Cal/EPA) developed CHHSLs for 54 hazardous chemicals in soil, soil gas, and indoor air (residential land uses and commercial/industrial land uses). The CHHSLs were developed by the Office of Environmental Health Hazard Assessment (OEHHA) on behalf of the CAL/EPA. The use of the CHHSL document is not intended to establish policy or regulation. Rather, the CHHSL document is a guidance document. The presence of a chemical at concentrations in excess of a CHHSL does not indicate that adverse impacts to human health are occurring or will

occur but suggests that further evaluation of potential human health concerns may be warranted.

As shown in Table 5, none of the detected concentrations of metals exceeded the CHHSLs to which they were compared except for arsenic which is further discussed below.

In addition, the concentrations of metals were compared to total threshold limit concentration (TTLC) concentrations adopted by the State of California Department of Toxic Substances Control (DTSC). The TTLC concentrations are used to determine whether soil would be classified as a hazardous or non-hazardous waste for disposal purposes.

As shown in Table 5, concentrations of metals detected in the soil pile samples did not exceed their respective TTLC concentrations.

Arsenic

Concentrations of arsenic ranging from 0.46 to 4.3 mg/kg were detected in the soil pile samples. All of the samples exceeded the CHHSLs for arsenic in residential (0.07 mg/kg) and industrial soil (0.24 mg/kg). However, normal arsenic background concentrations found in California soils generally range from 0.6 to 11 mg/kg and are typically above CHHSLs for both residential and industrial settings. The US EPA states that they generally do not require cleanup below natural background concentrations. In light of this fact and in our experience, regulatory agencies generally consider the use of local or regional background concentrations as the threshold concentration. The detected concentrations of arsenic in the soil pile samples ranged from 0.46 to 4.3 mg/kg and are within the range of typical background concentrations of arsenic found in California soils.

As shown in Table 5, the detected concentrations of arsenic in the soil pile samples (0.46 to 4.3 mg/kg) did not exceed the TTLC concentration for arsenic (500 mg/kg).

Organochlorine Pesticides

As shown in Table 6, one or more of the following organochlorine pesticides were detected in the soil pile samples collected from C1, C2 and C4: DDE, DDT, chlordane, dieldrin and endrin. No other organochlorine pesticides were detected in these soil pile samples. In addition, no organochlorine pesticides were detected in the soil pile sample collected from C3. The detected concentrations of pesticides were compared to the CHHSLs for industrial land use and the TTLCs. None of the detected concentrations of pesticides exceeded the CHHSLs or TTLCs to which they were compared.

FINDINGS OF THE SOIL PILE SAMPLING

VOCs and PCBs were not detected in any of the soil pile samples. Low concentrations of TPH and several pesticides were detected in the soil pile samples. The detected concentrations did not exceed the screening levels to which they were compared. Varying concentrations of metals were detected in the soil samples collected and analyzed for metals. All detected metals were within normal background concentrations. Based on the detected concentrations of contaminants, the soil piles would be considered non-hazardous waste for disposal purposes.



EVALUATION

FINDINGS

Known or suspect environmental conditions associated with the property include the following:

- Historic industrial use of the site
- Adjacent ASTs
- Nearby Tesoro site
- Nearby Oxnard Harbor District former UST site
- Nearby Naval Base Ventura County
- Nearby Naval Facility Engineering former UST site (560 Center Drive)

OPINIONS

- A. *Historic industrial use of the Subject Property* According to historic records reviewed, it appears that the subject property has been in industrial use since at least 1947. Based on the historic industrial use of the subject property, there is the potential for unidentified releases of hazardous materials at the subject property. The historic industrial use of the subject property is considered a suspect environmental condition.
- B. *Adjacent ASTs* According to aerial photographs, five large ASTs have been located on the eastern adjacent property since sometime between 1994 and 2005. Based on information obtained through the site reconnaissance, the ASTs are used for the storage of fertilizer and are located within secondary containment structures. The presence of the adjacent ASTs containing fertilizer is considered to be a *de minimis condition*.
- C. Nearby Tesoro site According to Orion's Quarterly Groundwater Monitoring and Remediation Status Report (July 9, 2015 Appendix 4) TPHd and naphthalene in groundwater were detected at concentrations exceeding site-specific risk-based cleanup levels at several monitoring wells within the LNAPL plume. The most recent groundwater monitoring report indicates that concentrations of TPHd and naphthalene are non-detect in downgradient monitoring wells PZ-14, PZ-16, and PZ-19. Based on the non-detect concentrations of TPHd and naphthalene in downgradient wells (which are approximately 1,500 feet east-northeast of the subject property), the former nearby Tesoro release does not appear to be impacting the subject property and is therefore considered to be a *de minimis condition*.
- D. Nearby Oxnard Harbor District former UST site According to files available through the VCEHD online database, on September 9, 1992 a release of gasoline/kerosene/waste oil occurred on the nearby property (located 350 feet to the north of the subject property). The UST(s) were subsequently removed on October 29, 1992 and soil samples were collected from the former tank cavity and piping trenches. No detectable concentrations of TPHd, TPH-gasoline (TPHg), or benzene, toluene, ethylbenzene, and xylenes (BTEX) were detected in the tank cavity soil samples. TPHd was detected in six of 12 soil samples collected from piping trenches. TPHd concentrations ranged from below 100 milligrams per kilogram (mg/kg) to 260 mg/kg. Two groundwater monitoring wells were installed on the property. Analytical results

did not reveal the presence of TPH in in groundwater. Closure of the Oxnard Harbor District case was granted by the County of Ventura Resource Management Agency in a letter dated May 2, 1994. Based on the documents reviewed, the release associated with the former USTs on this nearby site is not likely to impact the subject property and is considered to be a *de minimis condition*.

- E. Nearby Naval Base Ventura County (NBVC) Records reviewed on GeoTracker for the NBVC indicate that an old pistol range and an old rifle range are located about 1,000 feet and 1,500 feet to the west of the subject property across the harbor waterway entrance and both these sites are in the "site assessment phase." Furthermore an additional NBVC site (IRP Site 19 Tidal Canal and IRP Site 19A [Drainage Ditches]) is located at least located 3,000 feet to the north-northwest of the subject property. Documents reviewed on GeoTracker indicate that sediment in the tidal canal has been impacted with metals, PCBs, PAHs and pesticides, however, PCBs were determined to be the health risk contaminant of concern. Removal of the impacted sediment was conducted in December 2014/January 2015. Based on the distances from the subject property and the fact that the sediment has been removed from the Tidal Canal, the listings for the NBVC are not expected to adversely impact the subject property and are considered to be a de minimis condition..
- F. Nearby former release at Naval Facility Engineering (560 Center Drive) The property is listed on the underground storage tank (UST) database. According to EDR, this property is located about 300 feet to the east of the subject property, however the former USTs located at this Naval Facility site were located about 1,000 feet to the east of the subject property. According to the Ventura County Environmental Health Division (VCEHD) online database, two former 5,000-gallon USTs are associated with property. The tanks were removed on December 18, 1995. A letter from the VCEHD dated April 15, 1996 indicates that a release of fuel oil was detected and documented during tank removal activities (due to tank corrosion). Soil samples collected from the bottom of the excavations indicated low levels of total extractable petroleum hydrocarbons (TEPH) (13 to 56 milligrams per kilogram [mg/kg]) and no detectable levels of BTEX or other VOCs. Based on the information reviewed, and the distance from the subject property, the release associated with the former USTs is not expected to be affecting the subject property and is considered to be a de minimis condition.

CONCLUSIONS

Rincon has performed a Phase I ESA in general conformance with the scope and limitations of ASTM E 1527-13 for the property identified as Parcel B of the Oxnard Harbor District - Port of Hueneme located in the City of Port Hueneme, California. No Recognized Environmental Conditions have been identified in connection with the property, however, the following is a suspect environmental condition:

Suspect Environmental Condition

• The historic industrial use of the site.

RECOMMENDATIONS

To determine if the historic industrial use of the subject property has adversely affected the subject property, the Oxnard Harbor District may want to consider collecting soil samples from throughout the site, and analyzing the samples for potential contaminants of concern including TPH, VOCs and total metals.

Based on the historic research conducted as part of this Phase I ESA the majority of the current Site structures were constructed prior to 1977. Although not considered a REC per the ASTM E1527-13 standard, structures constructed prior to 1978 may contain lead based paint (LBP) and structures constructed prior to 1981 may contain asbestos containing building materials (ACBM). Based on the age of the onsite structure, there is the potential that LBP and ACBM were used during the construction of the onsite structure. To determine if LBP and ACBM are present in the onsite structures, a LBP and ACBM survey should be conducted.

DEVIATIONS

Deviations from ASTM E 1527-13 Practice were encountered during the completion of this Phase I ESA:

• A completed Property Owner Interview Questionnaire and User Questionnaire have not been returned to Rincon as of the date of this report.

REFERENCES

The following published reference materials were used in preparation of this Phase I ESA:

<u>Environmental database</u>: Environmental Data Resources (EDR) report dated September 14, 2015.

<u>Geology</u>: California Division of Mines and Geology, Geologic Map of California, Los Angeles Sheet (1969).

<u>Groundwater:</u> Quarterly Groundwater Monitoring and Remediation Status Report for the Former Tesoro Port Hueneme Terminal, 141 West Hueneme Road, dated July 9, 2015, prepared by Orion Environmental Inc.

Topography: USGS topographic map, Oxnard Quadrangle, 1967, photorevised 1949.

Oil and gas records: Division of Oil and Gas Munger Map Book (2003) or: State of California, Division of Oil, Gas and Geothermal Resources website: http://www.consrv.ca.gov/DOG/index.htm.

Aerial photographs: Photos provided by EDR.

Historic topographic maps: Maps provided by EDR.

<u>Other:</u> Hazardous Materials Inspection for Parcel B of the Port of Hueneme, Port Hueneme, California, draft dated September 18, 2015, prepared by Rincon Consultants.

SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

The qualified environmental professionals that are responsible for preparing the report include Sarah Larese, Meghan Hearne, and Walt Hamann. Their qualifications are summarized in the following section.

"We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in 312.10 of 40 CFR 312. We have the specific qualifications based on education, training and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312."

Signature	Date
Walt Hamann, PG, CEG, CHG	Vice President
Name	Title
Signature	Date
Sarah Larese	Senior Environmental Scientist
Name	Title
Signature	Date
M 1 II	F : (10: (1)
Meghan Hearne	Environmental Scientist
Name	Title

QUALIFICATIONS OF ENVIRONMENTAL CONSULTANTS

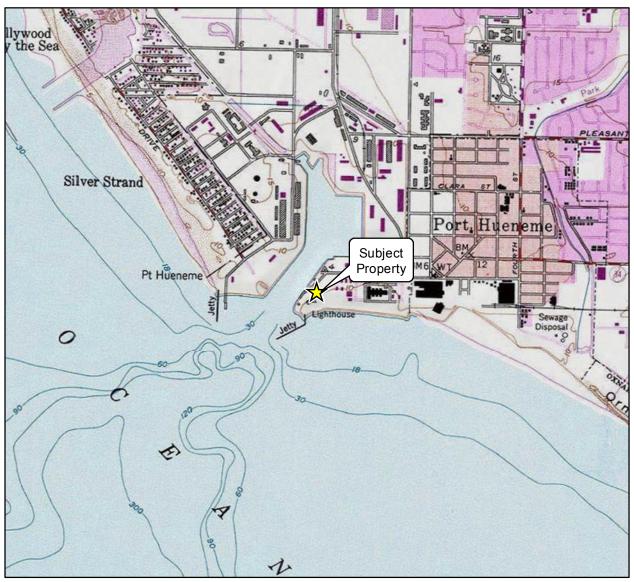
The environmental consultants responsible for conducting this Phase I ESA and preparing the report include Sarah Larese, Meghan Hearne, and Walt Hamann. Their qualifications are summarized below.

Environmental Professional Qualifications	X2.1.1 (2) (i) - Professional Engineer or Professional Geologist License or Registration, and 3 years of full-time relevant experience	X2.1.1 (2) (ii) - Licensed or certified by the Federal Government, State, Tribe, or U.S. Territory to perform environmental inquiries	X2.1.1 (2) (iii) – Baccalaureate or Higher Degree from and accredited institution of higher education in a discipline of engineering or science and the equivalent of 5 years of full-time relevant experience	X2.1.1 (2) (iii) – Equivalent of 10 years of full-time relevant experience
Walt Hamann	PG, CHG, CEG		MS Geology	30 years
Sarah Larese			BA Environmental Studies	16 years
Meghan Hearne	GIT		MS Geology	8 years

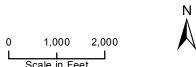
Walt Hamann, PG, CEG, CHG, is a Principal and Senior Geologist with Rincon Consultants. He holds a Bachelor of Arts degree in geology from the University of California, Santa Barbara and a Master of Science degree in geology from the University of California, Los Angeles. He has over 30 years of experience conducting assessment and remediation projects and has prepared or overseen the preparation of hundreds of Phase I and Phase II Environmental Site Assessments throughout California. Mr. Hamann is a Professional Geologist (#4742), Certified Engineering Geologist (#1635), and Certified Hydrogeologist (#208) with the State of California.

Sarah A. Larese is a Senior Environmental Scientist with Rincon Consultants. She holds a Bachelor of Science degree in environmental studies from the University of California, Santa Barbara, California. Ms. Larese has experience in development, implementation and project management of environmental assessment and remediation projects, especially relating to underground storage tanks. Ms. Larese's responsibilities at Rincon include implementation of Phase I and II Environmental Site Assessments as well as conducting site remediation field activities and preparation of environmental reports. She has 16 years of experience conducting research, assessment and remediation projects.

Meghan Hearne is an Environmental Scientist with Rincon Consultants. She holds a Master of Science degree in Geology from the University of North Carolina at Wilmington. Ms. Hearne has experience working on geotechnical investigations and Phase I and Phase II Environmental Site Assessments for a variety of commercial, rural, and industrial properties. Ms. Hearne's responsibilities at Rincon include implementation of Phase I and Phase II Environmental Site Assessments and reports.



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Vicinity Map

Figure 1

Table 4 - Soil Pile Sample Analytical Summary - TPH and VOCs
Port of Hueneme Parcel B

Sample Location	TPH-g	TPH-d	ТРН-о	VOCs			
	Result in milligrams per kilogram (mg/kg)						
C1	ND<14	13	150	ND			
C2	ND<5	5.5	48	ND			
C3	ND<5	6.1	27	ND			
C4	ND<5	8.2	76	ND			
SSL (GW Less than 20')	100	100	1,000	Varies			

Samples collected 9/10/2015

ND = Below the method detection limit

TPH-g = Total petroleum hydrocarbons as gasoline by EPA Method 8015B

TPH-d = Total petroleum hydrocarbons as diesel by EPA Method 8015C

TPH-o = Total petroleum hydrocarbons as oil by EPA Method 8015C

VOCs = Volatile Organic Compounds by EPA method 8260B

For a complete list of VOCs tested, see laboratory analytical report.

SSL = Maximum Soil Screening Levels for UST Closure Criteria, LA RWQCB, rev. Sept. 2006

Soil samples analyzed by BC Laboratories, Inc.

Table 5 - Soil Pile Sample Analytical Summary - Total Metals Port of Hueneme Parcel B

Sample Location	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Silver	Thallium	Vanadium	Zinc
		Results in milligrams per kilogram (mg/kg)															
C1	ND<0.33	2.3	67	0.16	0.43	13	3.5	16	16	NA<0.036	1.7	11	1.2	ND<0.067	ND<0.64	21	120
C2	ND<0.33	2.5	72	0.18	0.28	9.4	3.4	9.7	12	NA<0.036	0.48	8.2	ND<0.98	ND<0.067	ND<0.64	18	100
C3	ND<0.33	0.46	17	0.056	ND<0.052	50	0.79	4.3	2.3	ND<0.036	2.2	3.2	ND<0.98	ND<0.067	ND<0.64	6.2	110
C4	ND<0.33	4.3	53	0.18	0.36	13	4	14	23	ND<0.036	0.57	9.7	ND<0.98	ND<0.067	ND<0.64	20	150
Background	0.15 -	0.6 -	133 -	0.25 -	0.05 -	23 -	2.7 -	9.1 -	12.4 -	0.05 -	0.1 -	9.0 -	0.015 -	0.10 -	0.17 -	39 -	88 -
Concentration	1.95	11	1,400	2.70	1.70	1,579	46.9	96.4	97.1	0.90	9.6	509	0.430	8.3	1.1	288	236
CHHSL - Industrial	380	0.24	63,000	190	7.5	100,000	3,200	38,000	320	180	4,800	11,000	4,800	4,800	63	6,700	100,000
TTLC	500	500	10,000	75	100	2,500	8,000	2,500	1,000	20	3,500	2,000	100	500	700	2,400	5,000

Samples collected 9/10/2015

ND = Below the method detection limit

Background Concentration = Kearney, Background Concentrations of Trace and Major Elements in California Soils, University of California, 1996

CHHSL = California Human Health Screening Levels (Cal/EPA - Use of California Human Health Screening Levels in Evaluation of Contaminated Properties, September 2010)

Metals analyzed by EPA Method 6010B/7471A

Soil samples analyzed by BC Laboratories, LLC TTLC = Total Threshold Limit Concentration □

Table 6 - Soil Pile Sample Analytical Summary - Pesticides and PCBs Port of Hueneme Parcel B

Sample Location	4,4'-DDE	4,4'-DDT	Chlordane	Dieldrin	Endrin	Other Pesticides	PCBs	
		Results in micrograms per kilogram (μg/kg)						
C1	0.71	ND<0.18	270	2.4	12	ND	ND	
C2	1.7	2.9	130	0.39	ND<0.1	ND	ND	
C3	ND<0.13	ND<0.089	ND <43	ND< 0.092	ND<0.1	ND	ND	
C4	7.1	20	970	ND < 0.095	ND<0.1	ND	ND	
CHHSL - Industrial	6,300	6,300	1,700	130	230,000	varies	300	
TTLC	1,000	1,000	3,000	8,000	200	varies	50,000	

Samples collected 9/10/2015

ND = Below the method detection limit

4-4'-DDE = dichlorodiphenyldichloroethylene

4-4'-DDT = dichlorodiphenyltrichloroethane

CHHSL = California Human Health Screening Levels (Cal/EPA - Use of California Human Health Screening Levels in Evaluation of Contaminated Properties, September 2010)

TTLC = Total Threshold Limit Concentration ☐ Soil samples analyzed by BC Laboratories, LLC